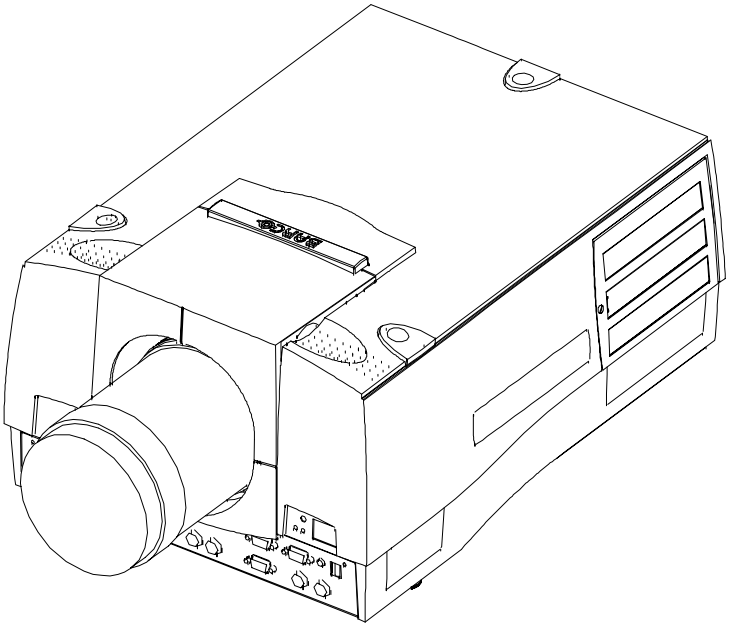
SIMULATION PRODUCTS



BARCOREALITY SIM 6 ULTRA MM

R9040171

OWNER'S MANUAL

Barco nv Simulation Products
600 Bellbrook Ave, Xenia OH 45385
Phone: +1 (937) 372 7579
Fax: +1 (937) 372 8645
E-mail: eis@barco.com
Visit us at the web: www.eis.barco.com

Barco nv Simulation Products
Noordlaan 5, B-8520 Kuurne
Phone: +32 56.36.82.11
Fax: +32 56.36.84.86
E-mail: info@barco.com
Visit us at the web: www.barco.com

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1. PACKAGING AND DIMENSIONS

This chapter handles about the way the projector is packed and gives an overview of the dimensions.

- Box content
- Projector Packaging
- Lens Packaging
- Dimensions

1.1 Box content

CEE7

European power plug to connect the power cord to the wall outlet.

ANSI 73.11

American power plug to connect the power cord to the wall outlet.

Content

- 1 projector BARCOREALITY SIM6 ULTRA MM(weight ± 17 kg or 37.4 lbs)
- 1 remote control unit RCU + 2 batteries.
- 2 power cables with outlet plug type CEE7 and ANSI 73.11.
- 1 owners manual
- 1 safety manual

1.2 Projector Packaging

Way of Packaging

The projector is packed in a carton box. To provide protection during transportation, the projector is surrounded with foam. The package is secured with banding and fastening clips.

To unpack

1. Release the fastening clips.
2. Remove the banding. Handle as shown in the drawing. (image 1-1)
3. Take the projector out of its shipping carton and place it on a table.

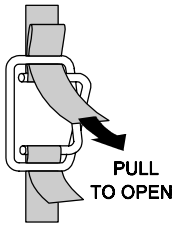

Image 1-1

Save the original shipping carton and packing material, they will be necessary if you ever have to ship your projector. For maximum protection, repack your projector as it was originally packed at the factory.

Never transport the projector with the lens mounted on it !

Always remove the lens before transporting the projector.

1.3 Lens Packaging

Way of Packaging

Lenses are supplied as an individual item.

They are packed in a carton box.

Save the original shipping carton and packing material, they will be necessary if you ever have to transport the lens.

Never transport the projector with the lens mounted on it !

Always remove the lens before transporting the projector.

1.4 Dimensions

Dimensions overview

Dimensions are given in mm (1 inch = 25.4 mm)

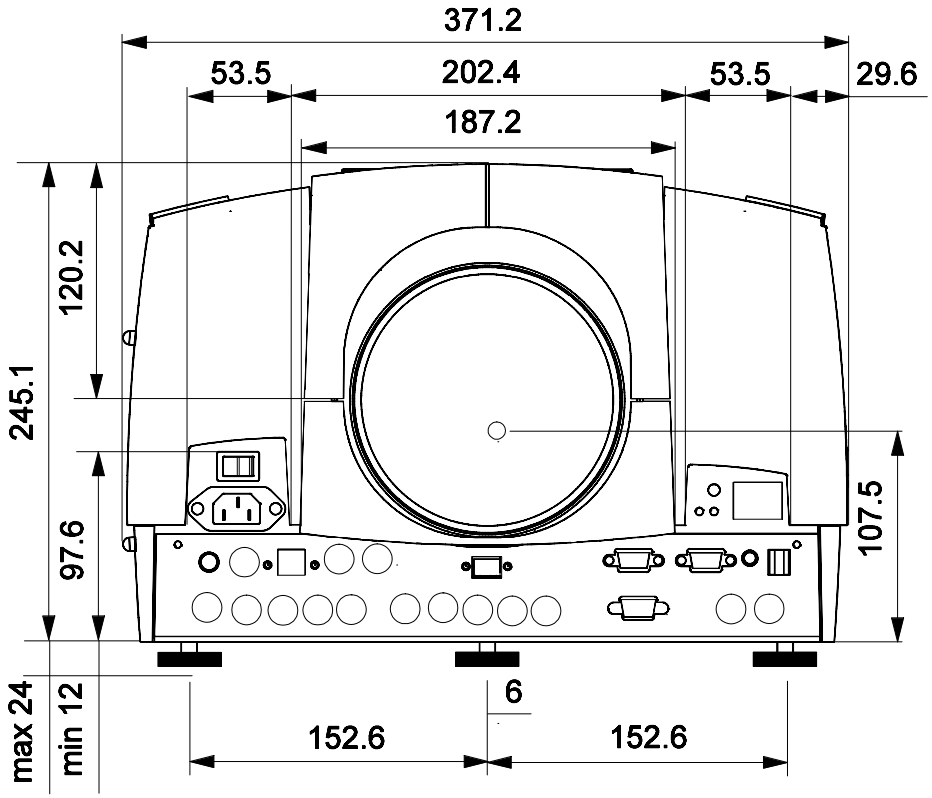

Image 1-2

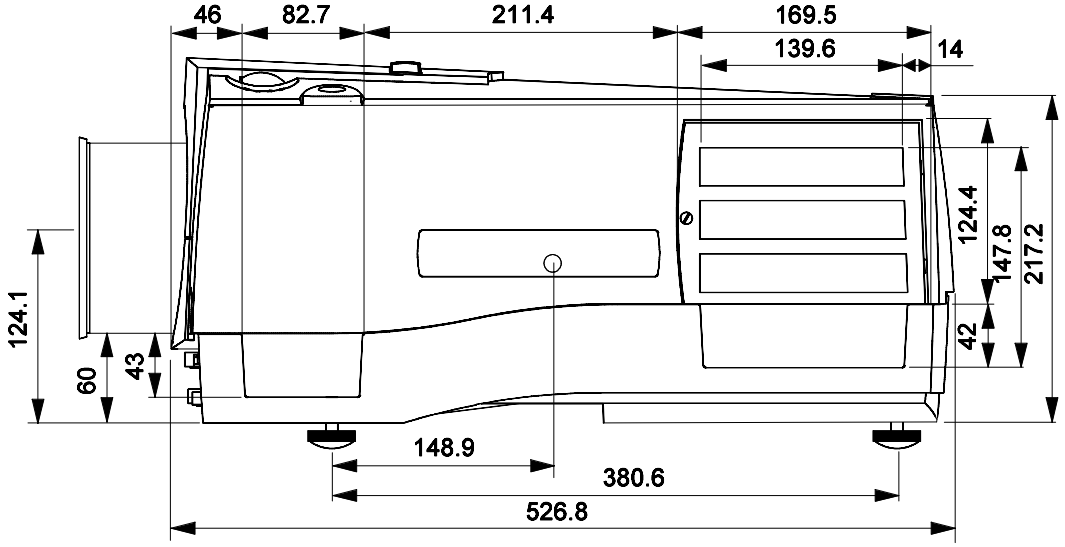

Image 1-3

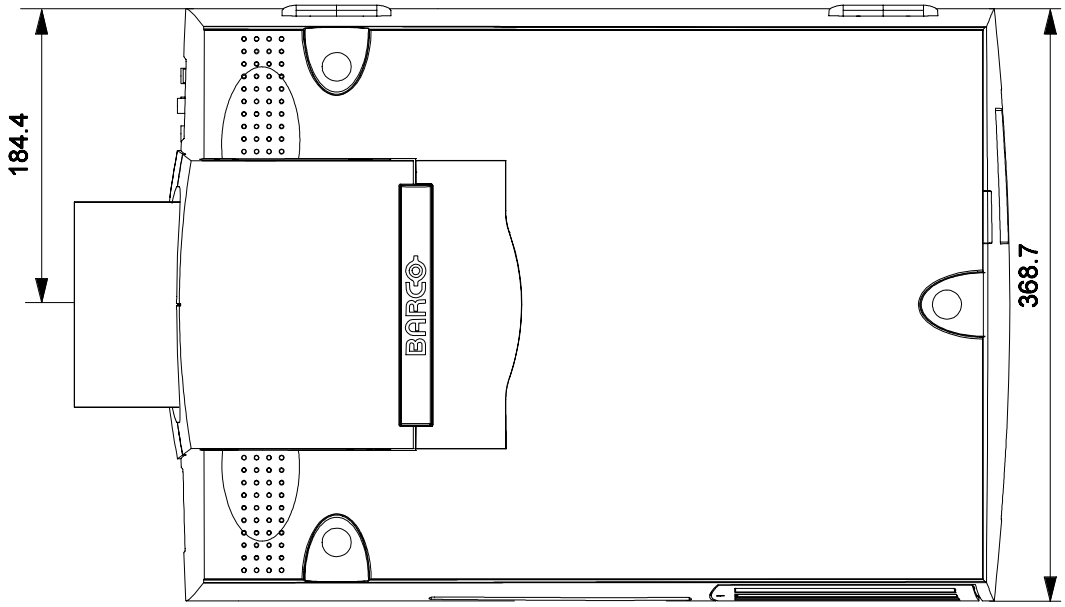

Image 1-4

2. INSTALLATION GUIDELINES

Overview

- Installation guidelines
- Configuration
- Lenses
- Batteries

Before installing the projector, read first the safety instructions supplied with the BARCOREALITY SIM6 ULTRA MM.

2.1 Installation guidelines

Ambient Temperature Conditions

Careful consideration of things such as image size, ambient light level, projector placement and type of screen to use are critical to the optimum use of the projection system.

Max. ambient temperature : 40 °C or 104 °F

Min. ambient temperature : 0 °C or 32 °F

The projector will not operate if ambient air temperature falls outside this range (0°C- 40°C or 32°F-104°F).

Storage temperature: -35°C to +65°C (-25.6°F to 149°F)

Humidity Conditions

Storage: 0 to 98 % RH Non-condensing

Operation: 0 to 95 % RH Non-condensing

Environment

Do not install the projection system in a site near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust or humidity. Be aware that room heat rises to the ceiling; check that temperature near the installation site is not excessive.

Harmful Environmental Contamination Precaution

Environment condition check

A projector must always be mounted in a manner which ensures the free flow of clean air into the projectors ventilation inlets. For installations in environments where the projector is subject to airborne contaminants such as that produced by smoke machines or similar (these deposit a thin layer of greasy residue upon the projectors internal optics and imaging electronic surfaces, degrading performance), then it is highly advisable and desirable to have this contamination removed prior to it reaching the projectors clean air supply. Devices or structures to extract or shield contaminated air well away from the projector are a prerequisite, if this is not a feasible solution then measures to relocate the projector to a clean air environment should be considered.

Only ever use the manufactures recommended cleaning kit which has been specifically designed for cleaning optical parts, never use industrial strength cleaners on a projectors optics as these will degrade optical coatings and damage sensitive optoelectronic components. Failure to take suitable precautions to protect the projector from the effects of persistent and prolonged air contaminants will culminate in extensive and irreversible ingrained optical damage. At this stage cleaning of the internal optical units will be non-effective and impracticable. Damage of this nature is under no circumstances covered under the manufactures warranty and may deem the warranty null and void. In such a case the client shall be held solely responsible for all costs incurred during any repair. It is the clients responsibility to ensure at all times that the projector is protected from the harmful effects of hostile airborne particles in the environment of the projector. The manufacture reserves the right to refuse repair if a projector has been subject to wantful neglect, abandon or improper use.

What about ambient light ?

The ambient light level of any room is made up of direct or indirect sunlight and the light fixtures in the room. The amount of ambient light will determine how bright the image will appear. So, avoid direct light on the screen. Windows that face the screen should be covered by opaque drapery while the set is being viewed. It is desirable to install the projection system in a room whose walls and floor are of non-reflecting material. The use of recessed ceiling lights and a method of dimming those lights to an acceptable level is also important. Too much ambient light will ‘wash out’ of the projected image. This appears as less contrast between the darkest

and lightest parts of the image. With bigger screens, the 'wash out' becomes more important. As a general rule, darken the room to the point where there is just sufficient light to read or write comfortably. Spot lighting is desirable for illuminating small areas so that interference with the screen is minimal.

Which screen type ?

There are two major categories of screens used for projection equipment. Those used for front projected images and those for rear projection applications.

Screens are rated by how much light they reflect (or transmit in the case of rear projection systems) given a determined amount of light projected toward them. The 'GAIN' of a screen is the term used. Front and rear screens are both rated in terms of gain. The gain of screens range from a white matte screen with a gain of 1 (x1) to a brushed aluminized screen with a gain of 10 (x10) or more. The choice between higher and lower gain screens is largely a matter of personal preference and another consideration called the Viewing angle. In considering the type of screen to choose, determine where the viewers will be located and go for the highest gain screen possible. A high gain screen will provide a brighter picture but reduce the viewing angle. For more information about screens, contact your local screen supplier. A high gain screen will provide a brighter picture but reduce the viewing angle.

What image size ? How big should the image be ?

The projector is designed for projecting an image size (video) from 1.00m (3.3ft) to 6.00m (19.7ft) with a aspect ratio of 5 to 4.

2.2 Configuration

Which configuration can be used ?

The projector can be installed to project images in four different configurations :

- Front/table
- Rear/table
- Front/ceiling
- Rear/ceiling

Positioning the projector

Drawings are given for a nominal lens position.

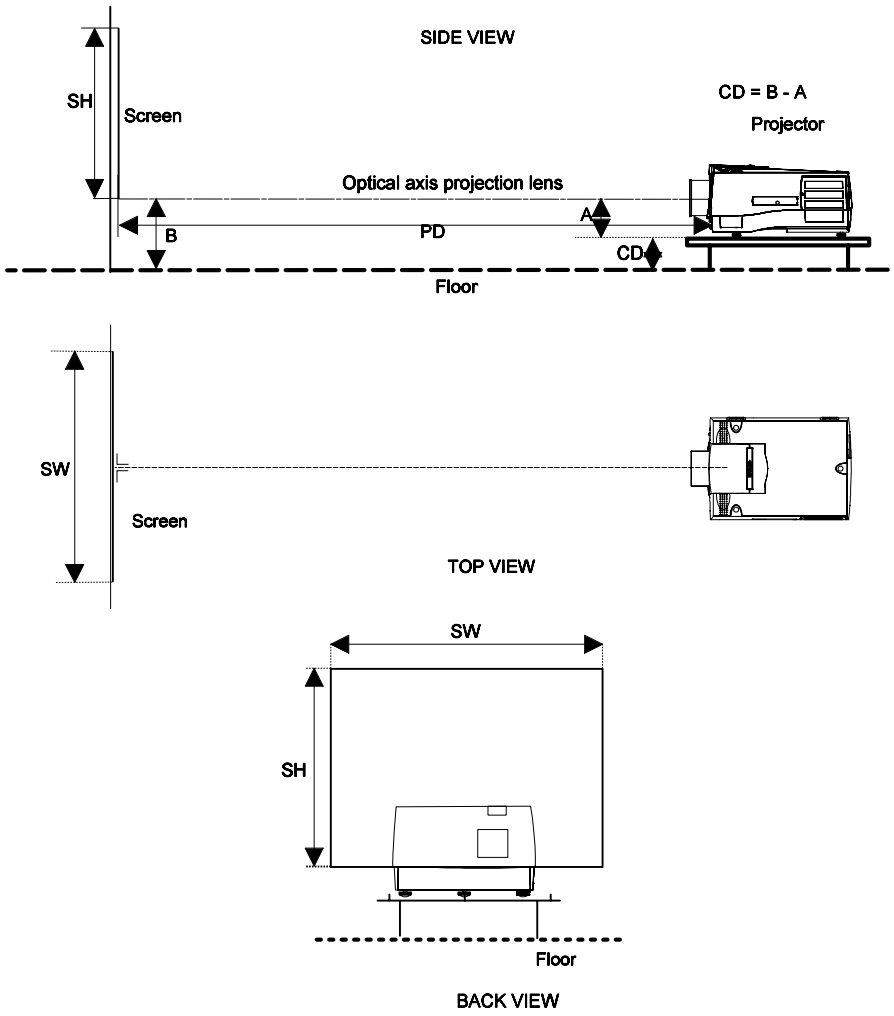

Image 2-1

B Distance between ceiling and top of the screen or between floor and bottom of the screen.
A Correction value, distance between bottom side of projector (without feet) and middle of the lens. Value to be subtracted from B to obtain the correct installation position. (A value is a constant value for all screen widths and type of lenses, A = 124.1 mm or 4.89 inch)
CD Total distance between projector and ceiling or projector and floor.
SW Screen width
SH Screen height (image height)
PD Projector distance, distance between screen and projector

2.3 Lenses

Overview

- Lenses
- Lens formulas
- Lens installation
- Cleaning the lens

2.3.1 Lenses

Available lenses

The following lenses are available, or will become available (contact a BARCO service center) as an option :

Lenses	Standard version	Sheimpflug version
QFD(1.27:1)	**R9840400**	**R9840600**
QFD(2.5:1)	**R9840290**	**R9840470**

Lenses	Standard version	Sheimpflug version
QFD(1.4-2.1:1)	**R9840380**	**R9840610**
QFD(2.1-3.0:1)	**R9840390**	**R9840590**
QFD(3.4-4.5:1)	**R9840060**	**R9840580**
QFD(4.5-6.0:1)	**R9840100**	**R9840460**
QFD(7:1)	**R9840410**	—
QGD(0.8:1) / SW: (1-1.4)m	**R9829800**	**R9840480**
QGD(0.8:1) / SW: (1.7-2.4)m	**R9840040**	**R9840490**
QGD(0.86:1)	**R9840491**	**R9840492**

2.3.2 Lens formulas

Formulas

Lenses	Metric Formulas (meter)	Inch Formulas (inch)
QFD(1.27:1)	PD = 1.29 x SW — 0,0195 + 0,00276 / SW	PD = 1.29 x SW — 0.768 + 4.278 / SW
QFD(2.5:1)	PD = 2.427 x SW + 0,025 + 0,022 / SW	PD = 2.427 x SW +0.984 + 34.10 / SW
QFD(1.4-2.1:1)	PD_{min} = 1,44 x SW + 0,0287 — 0,022 / SW PD_{max} = 2,20 x SW — 0,01 + 0,020 / SW	PD_{min} = 1.44 x SW + 1.13 — 34.10 / SW PD_{max} = 2.20 x SW — 0.39 + 31.00 / SW
QFD(2.1-3.0:1)	PD_{min} = 2,13 x SW — 0,10 + 0,056 / SW PD_{max} = 2,90 x SW + 0,10 — 0,0745 / SW	PD_{min} = 2.13 x SW — 3.937 + 86.80 / SW PD_{max} = 2.90 x SW + 3.937 — 115.48 / SW
QFD(3.4-4.5:1)	PD_{min} = 3,374 x SW — 0,115 + 0,0575 / SW PD_{max} = 4,433 x SW — 0,133 + 0,0556 / SW	PD_{min} = 3.374 x SW — 4.53 + 89.13 / SW PD_{max} = 4.433 x SW — 5.24 + 86.18 / SW
QFD(4.5-6.0:1)	PD_{min} = 4,29 x SW — 0,02 + 0,0009 / SW PD_{max} = 5,86 x SW + 0,15 + 0,0121 / SW	PD_{min} = 4.29 x SW — 0.787 + 1.395 / SW PD_{max} = 5.86 x SW + 5.906 + 18.755 / SW
QFD(7.0:1)	PD = 6,882 x SW — 0,045 + 0,048 / SW	PD = 6.882 x SW — 1.772 + 74.4 / SW
QGD(0.8:1) / SW: (1-1.4)m	PD = 0,775 x SW — 0,048 + 0,0074 / SW	PD = 0.775 x SW — 1.89 + 11.47 / SW
QGD(0.8:1) / SW: (1.7-2.4)m	PD = 0,775 x SW — 0,048 + 0,0072 / SW	PD = 0.775 x SW — 1.89 + 11.47 / SW
QGD(0.86:1)	PD = 0,8376 x SW + 0,00254 — 0,0150 / SW	PD = 0.8376 x SW + 0.1 — 23.25 / SW

Lens program to calculate the projector distance is available on the BARCO web site : http://www.barco.com/projection_systems/customer_services/lens_program.asp

2.3.3 Lens installation

How to install ?

Follow the next procedure :

1. Open the lens cover of the projector by pivoting it up and take it off. (image 2-2)
2. Pull the lens locks levers backwards to open the lens locks. (image 2-3)
3. Put the lens on the lens holder. (image 2-4)
4. Push the lens locks back in position and lock the levers.
5. Plug the wires of the motor unit into the connector (image 2-5)
6. Re-install the lens cover.

Image 2-2

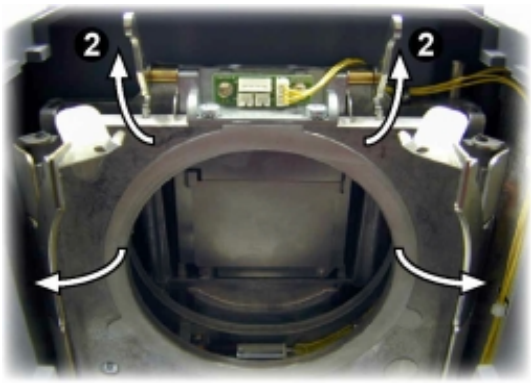

Image 2-3

Image 2-4

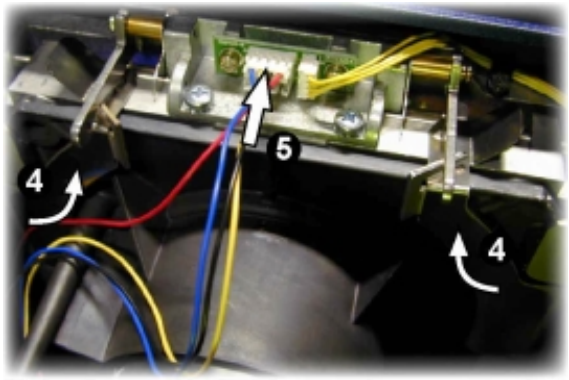

Image 2-5

The procedure for the mounting of a Scheimpflug lens is different.

Refer to the installation manual of the lens.

Never transport the projector with the lens mounted on it !

Always remove the lens before transporting the projector.

2.3.4 Cleaning the lens

To minimize the possibility of damaging the optical coating or scratching exposed lens surface, we have developed recommendations for cleaning the lens. FIRST, we recommend you try to remove any material from the lens by blowing it off with clean, dry deionized air. DO NOT use any liquid to clean the lenses.

Necessary tools

Toraysee™ cloth (delivered together with the lens kit). Order number : R379058.

How to clean the lens ?

Proceed as follow :

1. Always wipe lenses with a CLEAN Toraysee™ cloth.
2. Always wipe lenses in a single direction.
   Warning: *Do not wipe back and forwards across the lens surface as this tends to grind dirt into the coating.*
3. Do not leave cleaning cloth in either an open room or lab coat pocket, as doing so can contaminate the cloth.
4. If smears occur when cleaning lenses, replace the cloth. Smears are the first indication of a dirty cloth.

Do not use fabric softener when washing the cleaning cloth or softener sheets when drying the cloth.

Do not use liquid cleaners on the cloth as doing so will contaminate the cloth.

Other lenses can also be cleaned safely with this Toraysee™ cloth.

2.4 Batteries

Overview

- Battery installation
- Battery replacement

2.4.1 Battery installation

How to install the battery

Two batteries are packed together with the RCU. Before using your RCU, install first these batteries.

1. Remove the battery cover on the backside by pushing the handle a little towards the bottom of the RCU.
2. Lift up the top side of the cover at the same time.
3. Insert the batteries as indicated in the RCU.
4. Put the battery cover on its place.

2.4.2 Battery replacement

How to replace the batteries in the RCU

To replace the batteries :

1. Remove the battery cover on the backside by pushing the handle a little towards the bottom of the RCU.
2. Lift up the top side of the cover at the same time.
3. Push on the + side of the battery towards the - side
4. Lift up the battery at the same time.
5. Repeat for the second battery.
6. Insert the batteries as indicated in the RCU (battery type AA or LR6 or equivalent).
7. Put the battery cover on its place. (image 2-6)

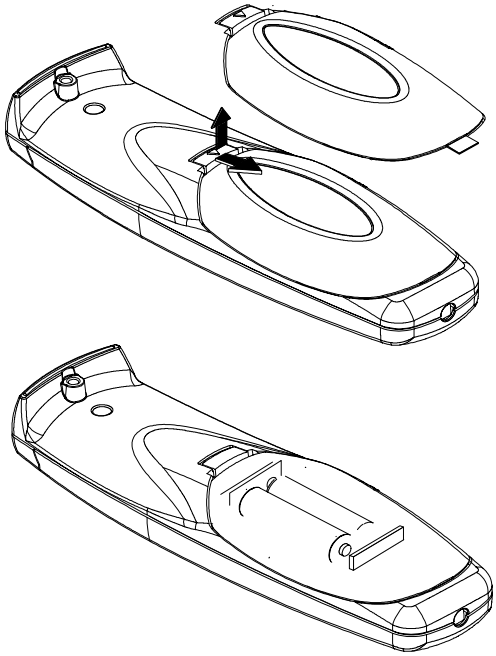

Image 2-6

Note, only important if more than one projector is installed in the room.

The common address can be zero (0) or one (1). The standard RCU are setup for common address zero. To change the common address of the RCU, contact a BARCO service center. If it is necessary to program the projector address into the RCU, see chapter 'Getting Started'.

Projector address has to be reprogrammed every time the battery is changed, the RCU will always switch to the default address.

3. CONNECTIONS

Overview

- Power connection
- Input Source connection

3.1 Power connection

AC Power cord connection

Use the supplied power cord to connect your projector to the wall outlet. Plug the female power connector into the male connector at the front of the projector. The power input is auto-ranging from 90 to 240 VAC.

Fuses

For continued protection against fire hazard :

- refer replacement to qualified service personnel.
- ask to replace with the same type of fuse (T10 AH/250V).

3.2 Input Source connection

3.2.1 Input facilities

Overview input facilities

- 5-cable input (BNC1)
- 5-cable Data input (BNC2)
- Composite Video
- S-Video
- SDI: Serial Digital Interface (I/O)
- DVI : Digital Visual Interface
- HDSDI: High Definition SDI

3.2.2 5-cable input (BNC1)

Where to find ?

Slot 1 has 5 BNC input terminals, located as shown on the image.

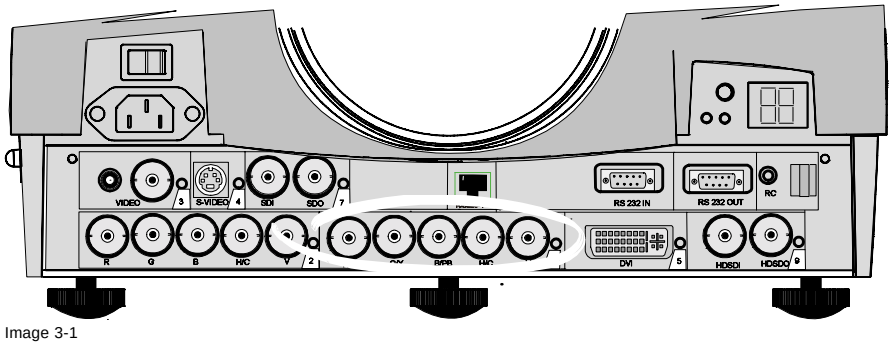

Image 3-1

Which signals can be connected to the 5 cable input.

The following signals can be connected to these BNC connectors :

Connector name	R	G	B	H	V
RGBHV	R	G	B	H	V
RGBS	R	G	B	S	-
RG_SB	R	G_S	B	-	-
Composite video	-	Video	-	-	-
Super Video	-	Y	-	-	C
Component Video - SS	R-Y	Y	B-Y	S	-
Component Video - SOY	R-Y	Y_S	B-Y	-	-

How to select slot 1

1. Press key 1 on the RCU or the local keypad or use the menu

The selection of a composite video connected to the 5 cable input happens by pressing “3”, the composite video configuration has to be done in the source selection menu.

3.2.3 5-cable data input (BNC2)

What can be connected ?

The following signals can be connected to these BNC connectors :

Connector name	R	G	B	H	V
RGBHV	R	G	B	H	V
RGBS	R	G	B	S	-
RG_SB	R	G_S	B	-	-

How to connect a computer to the input?

1. Connect the output of the graphical card of the computer to the Computer input of the projector (image 3-2)

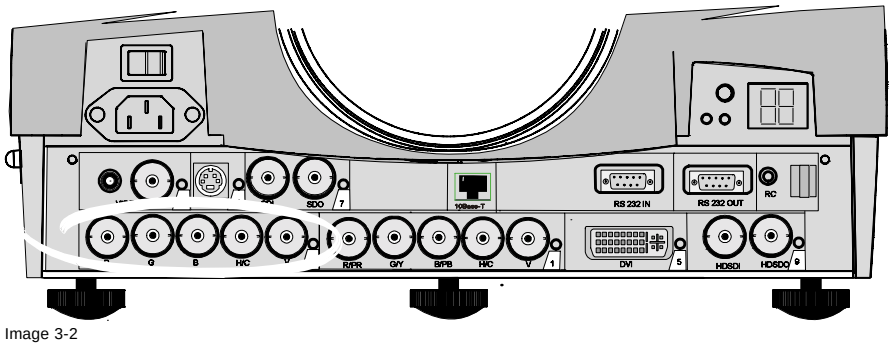

Image 3-2

How to select slot 2

1. Press key 2 on the RCU or the local keypad or use the menu

3.2.4 Video input

Video

Composite Video is a single video signal that contains luminance, color and synchronization information. NTSC, PAL and SECAM are examples of composite video systems.

What can be connected to the Video input?

Composite video signals from a VCR, OFF air signal decoder, etc... No loop through.

How to connect a Video source.

1. Connect the video output of your source to the video input of the projector (slot 3). 1 x BNC or cinch 1.0Vpp ± 3 dB. (image 3-3)
   Note: *No loop through available.*

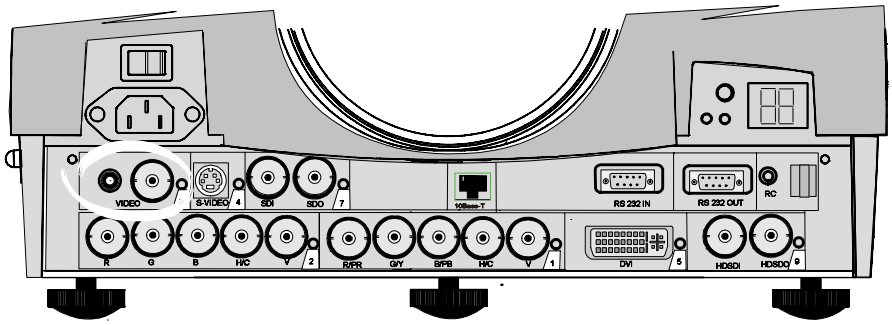

Image 3-3

How to select slot 3

1. Key in 3 on the RCU or the local keypad or use the menu

The cinch connector and the BNC connector are internaly connected together.

A video signal can also be connected on the 5 cable input (BNC1)

3.2.5 S-Video input

What can be connected?

Separate Y-luma/C-chroma signals for higher quality playback of Super VHS-signals.

How to connect the S-Video signal.

1. Connect the S-video output of your source to the S-video input of the projector (slot 4)

Pin configuration of the mini DIN plug.

1	ground luminance
2	ground chrominance
3	luminance 1.0Vpp ± 3dB
4	chrominance 282 mVpp ± 3dB

How to select slot 4?

1. Key in 4 on the RCU or the local keypad or use the menu (image 3-4)

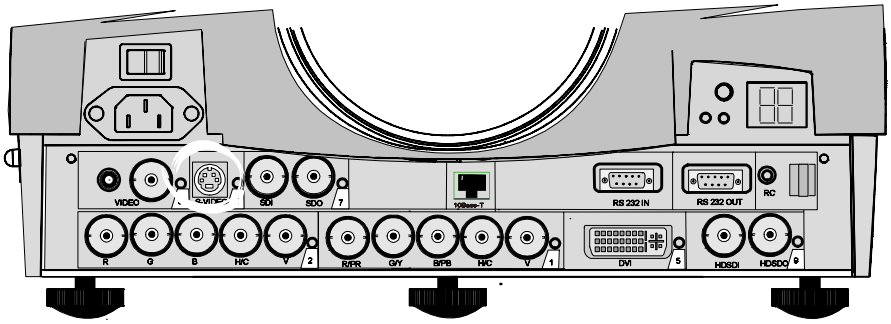

Image 3-4

3.2.6 Digital Visual Interface (DVI) input

DVI

Digital Visual Interface is a display interface developed in response to the proliferation of digital flat panel displays. It uses a high speed serial interface with TMDS (Transition Minimized differential signalling) to send data to the display.

DVI can be single or dual link.

Input specifications

Single link DVI

Differential input voltage: 200 mV - 800mV

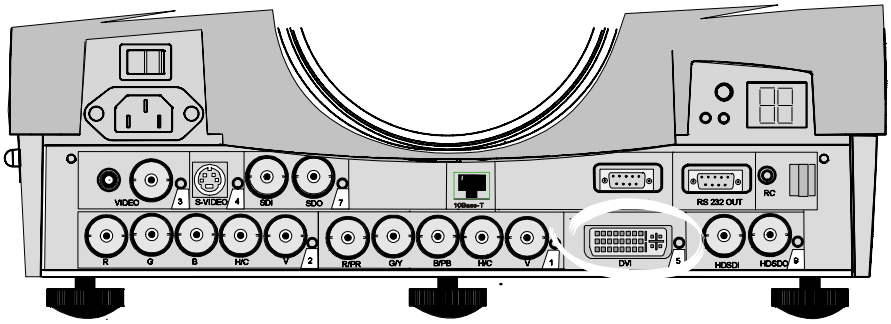

Image 3-5
DVI-I type connector analog link (4 pins at the right side of the connector) not supported

How to select the DVI Input ?

1. Press **5** on the RCU or the locol keypad or use the menu

3.2.7 SDI input

What can be connected ?

This avoids the need for analog processing anywhere in the video production chain and guarantees the ultimate image quality. An active loop through of the SDI input signal is provided for monitoring or for double or triple stacking applications.

How to connect a SDI source ?

1. Connect the out of your SDI source to the BNC SDI input of the projector. (image 3-6)
   Note: *The input is always 75 ohm terminated.*
2. If loop through is needed, use the SDO output to connect to next device.
   Note: *The output impedance of the SDO is 75 ohm.*

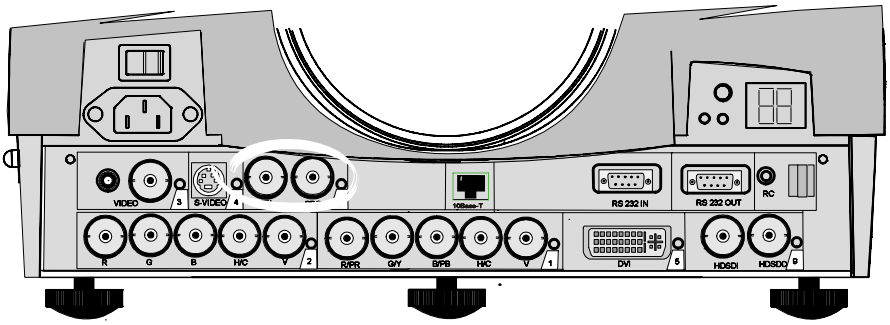

Image 3-6

How to select slot 7

1. Key in 7on the RCU or the local keypad or use the menu

3.2.8 HDSDI input

What can be connected ?

This avoids the need for analog processing anywhere in the video production chain and guarantees the ultimate image quality. An active loop through of the HDSDI input signal is provided for monitoring or for double or triple stacking applications.

How to connect a HDSDI source ?

1. Connect the out of your HDSDI source to the BNC HDSDI input of the projector. (image 3-7)
   Note: *The input is always 75 ohm terminated.*
2. If loop through is needed, use the HDSDO output to connect to next device.
   Note: *The output impedance of the HDSDO is 75 ohm.*

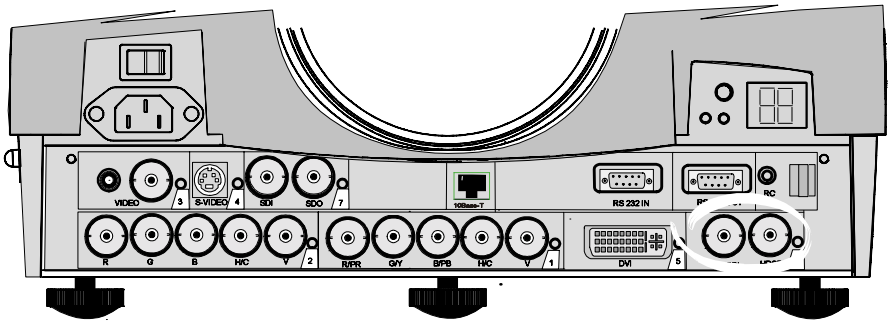

Image 3-7

3.2.9 Communications

3.2.9.1 RS232 IN connection

What can be connected to the RS232 IN connection ?

The RS 232 IN connections allows the projector to communicate with a Computer e.g. IBM PC or Apple Macintosh.

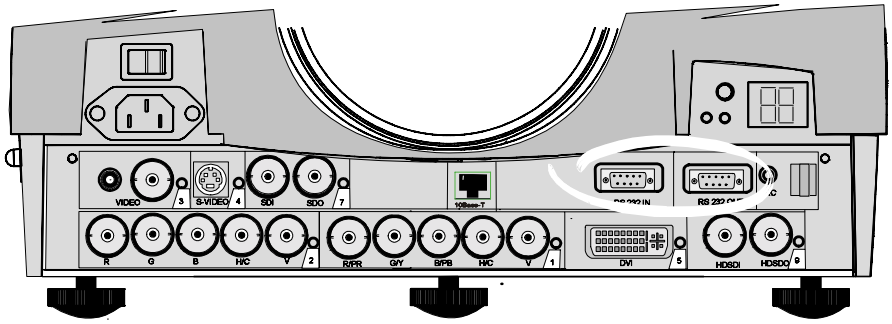

Image 3-8

Applications of the RS232 connection

Remote control:

- easy adjustment of projector via IBM PC (or compatible) or MAC connection.
- address range from 1 to 255
- allow storage of multiple projector configurations and set ups.
- wide range of control possibilities

Data communication: sending data to the projector or copying the data from the projector to the computer

To set up the baudrate see “Installation” menu

4. GETTING STARTED

Overview

- RCU & Local keypad
- Terminology overview
- Switching on
- Lamp runtime
- Quick set up adjustments

4.1 RCU & Local keypad

How controlling the projector ?

The projector can be controlled by the local keypad or by the remote control unit.

Location of the local keypad ?

The local keypad is located on the backside of the projector.

Remote control functions.

This remote control includes a battery powered infrared (IR) transmitter that allows the user to control the projector remotely. This remote control is used for source selection, control, adaptation and set up. It includes automatic storing of picture controls (Brightness, Sharpness...) and settings.

Other functions of the remote control are :

- switching between stand by and operational mode.
- switching to "pause" (blanked picture, full power for immediate restarting)
- direct access to all connected sources.

4.2 Terminology overview

Overview

The following table gives an overview of the different functionalities of the keys.

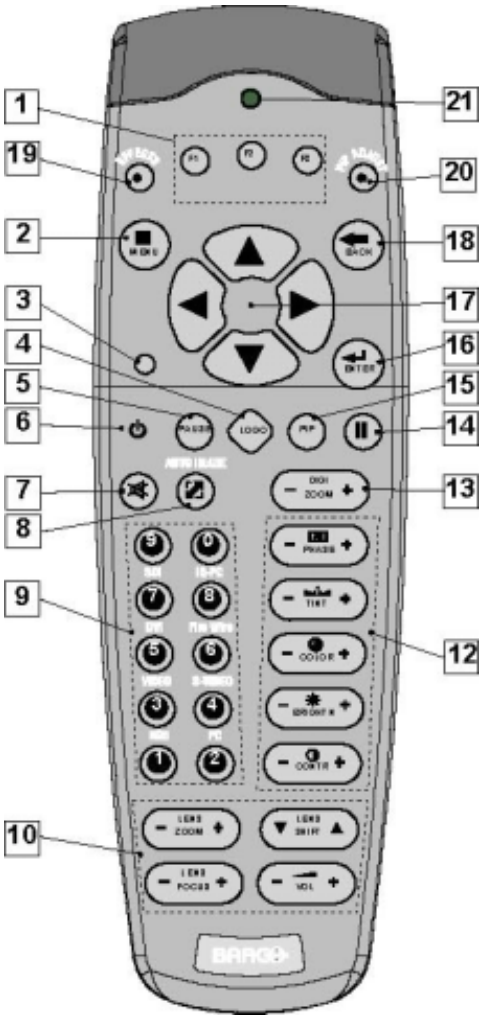

Image 4-1

1	Function keys	user programmable keys with functions for direct access.
2	MENU	Menu key, to enter or exit the Toolbar menu.
3	Address key	(recessed key), to enter the address of the projector (between 0 and 9). Press the recessed address key with a pencil, followed by pressing one digit button between 0 and 9.
4	LOGO key	allows to recall the stored Logo (not in PiP mode)
5	PAUSE	to stop projection for a short time, press 'PAUSE'. The image disappears but full power is retained for immediate restarting.
6	STBY	standby button, to start projector when the power switch is switched on and to switch off the projector without switching off the power switch. **Attention : Switching to Standby. When the projector is running and you want to go to standby, press the standby key for 2 seconds.**
7	MUTE	not used
8	**AUTOIMAGE**	Auto image, to center the image on the active LCD surface.
9	Digit buttons	direct input selection.
9b	SOURCE button	this button allows to switch through the active (scanned) inputs
10	Lens control	use these buttons to obtain the desired ZOOM, SHIFT, FOCUS.
11	VOL	not used
12	Picture controls	use these buttons to obtain the desired picture analog level.
13	**DIGI ZOOM**	allows a digital Zoom of a part of the image

14	FREEZ	press to freeze the projected image.
15	**PIP**	allows to activate the PICTURE IN PICTURE mode
16	ENTER	to confirm an adjustment or selection in the MENU. On the local keypad the ENTER button additionally accesses the PIP window resize function
17	Cursor keys	Cursor Keys on RCU or on the local keypad : to make menu selections or to access the toolbar.
18	BACK	to leave the selected menu or item (go upwards to previous menu).
20	**PIP ADJUST**	allows to select a PiP window and change its configuration on screen
21	RC operating indication	lights up when a button on the remote control is pressed. (This is a visual indicator to check the operation of the remote control)
22	IR receiver	IR receiver

Table 4-1

4.3 Switching on

How to switch on.

1. Press the power switch to switch on the projector.

   The projector starts in standby mode. The projector indication lamp is red and the display indicates (_)

   When switching back to standby, this will be indicated by (--) on the display.

Starting image projection.

1. Press **Stand by** key once on the local keypad or on the remote control.

   The projector mode indication lamp will be green

   During the power on sequence the display shows (L). After that sequence the selected source is displayed (when no source is selected, the displays shows a point mark). (image 4-2, image 4-3)

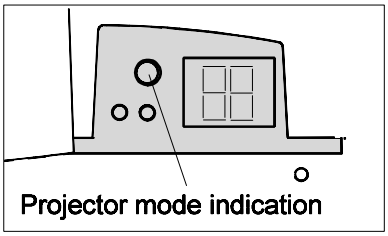

Image 4-2

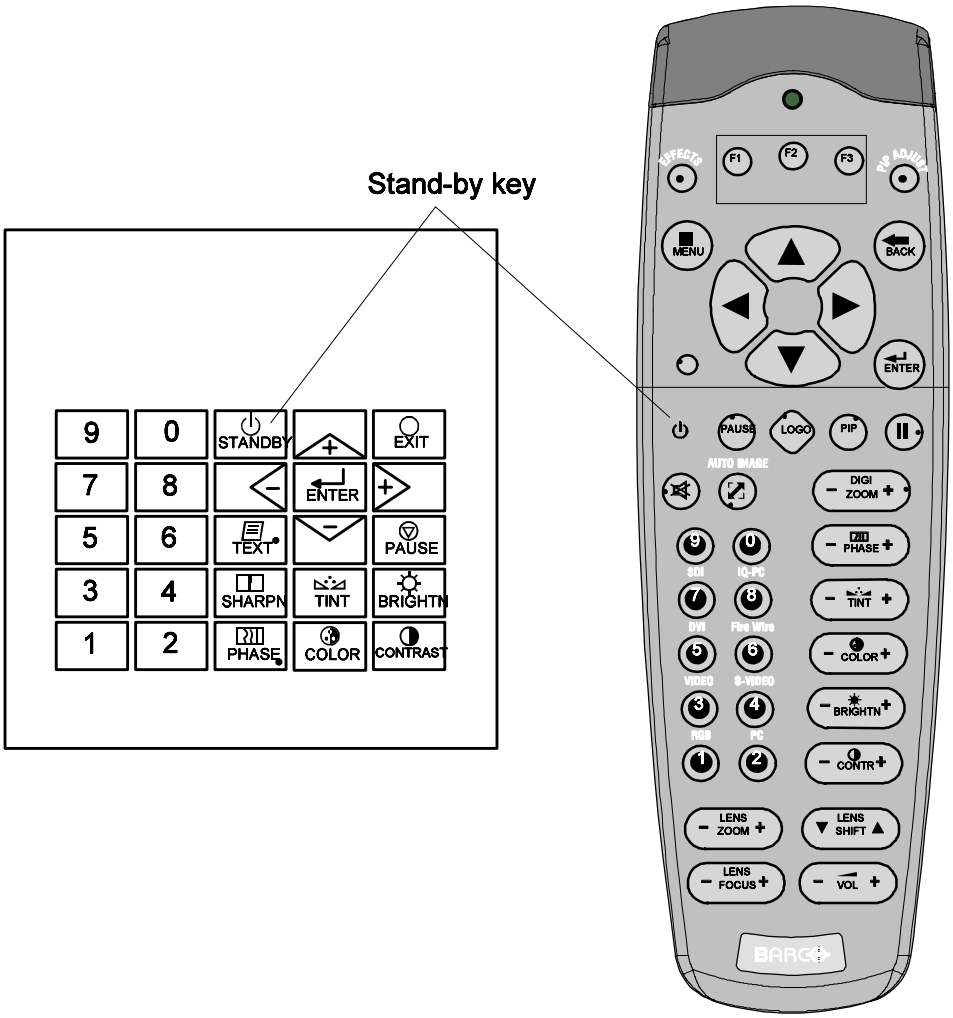

Image 4-3

4.4 Lamp runtime

Lamp runtime indication while running

When the total runtime of the lamp is 970 hours or more, a warning message will be displayed.

This warning message will be repeated at the next start up. Press **BACK** or **MENU** to remove the message.

The total lifetime of the lamp for a safe operation is 1000 hours max, do not use it longer. Always replace with a same type of lamp. Call a BARCO authorized service technician for lamp replacement.

At the end of the lifetime of the lamp (**1000** hours) the projector generates an alert message.

A countdown time of 4 minutes is triggered before the projector is shut down (standby).

If the lamp runtime has not been reset, the alert message will reappear at the next start up (with again 4 minutes countdown time).

This alert message can be escaped with **MENU** or **BACK**, but the countdown continues.

Contact a qualified Barco technician for lamp replacement.

Using a lamp for more than its recommended life time is dangerous as the lamp could explode.

4.5 Quick set up adjustments

Overview

- Quick lens Adjustment
- Using the RCU
- Projector address
- Controlling the projector
- Using the menu
- Using the Dialogboxes

4.5.1 Quick lens Adjustment

What can be done ?

For a quick lens set up and image shift, use the RCU dedicated keys.

Zoom/focus are only available for motorized lenses.

Quick zoom/focus adjustment

1. Press **LENS ZOOM** or **LENS FOCUS** on the RCU
2. Use the arrow keys to adjust

Quick shift adjustment

1. Press **LENS SHIFT**
2. Press ← or → to shift horizontaly
3. Press ↓or ↑ to shift verticaly

4.5.2 Using the RCU

Pointing to the reflective screen

1. Point the front of the RCU to the reflective screen surface. (image 4-4)

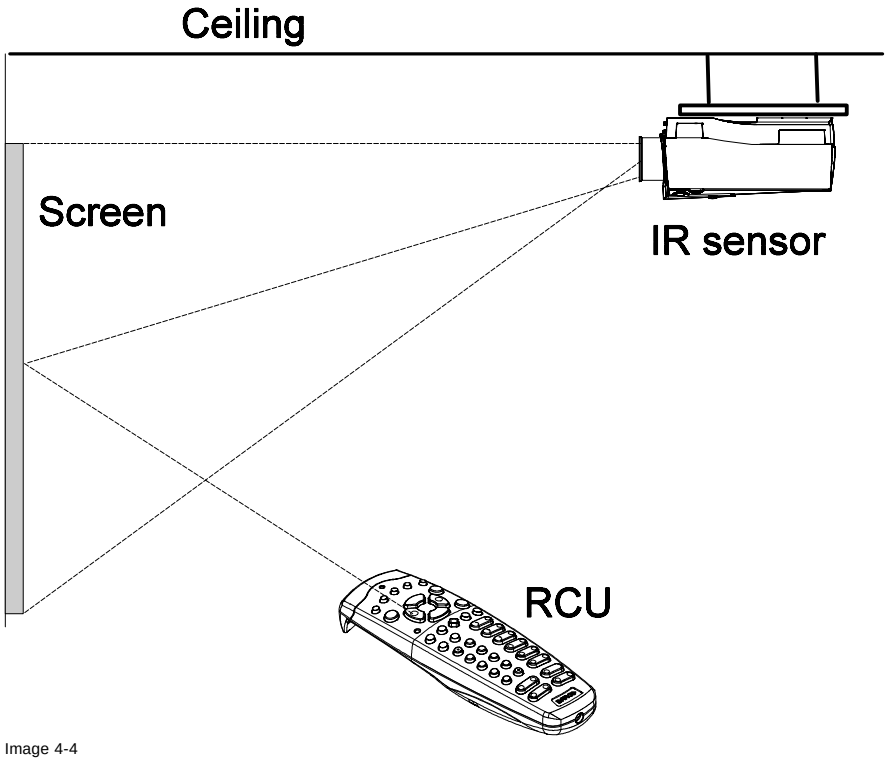

Image 4-4

Hardwired Remote Input

1. Plug one end of the remote cable in the connector on the bottom of the RCU.
2. Plug the other end in the connector in the front panel of the projector labelled ***RC***. (image 4-5)

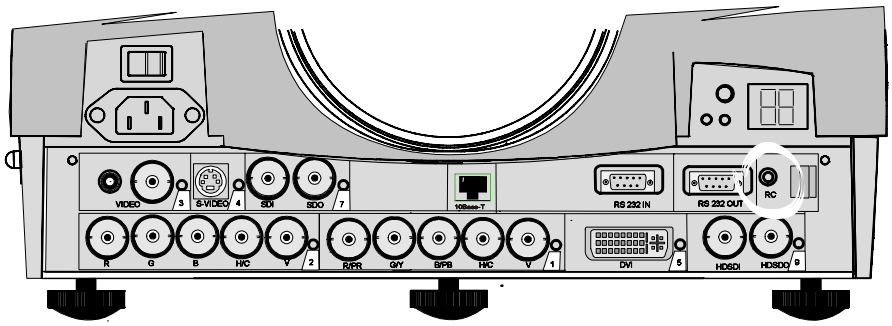

Image 4-5

Directly to one of the IR sensors of the projector.

When using the wireless remote control, make sure you are within the effective operating distance (30m, 100ft in a straight line). The remote control unit will not function properly if strong light strikes the sensor window or if there are obstacles between the remote control unit and the projector IR sensor.

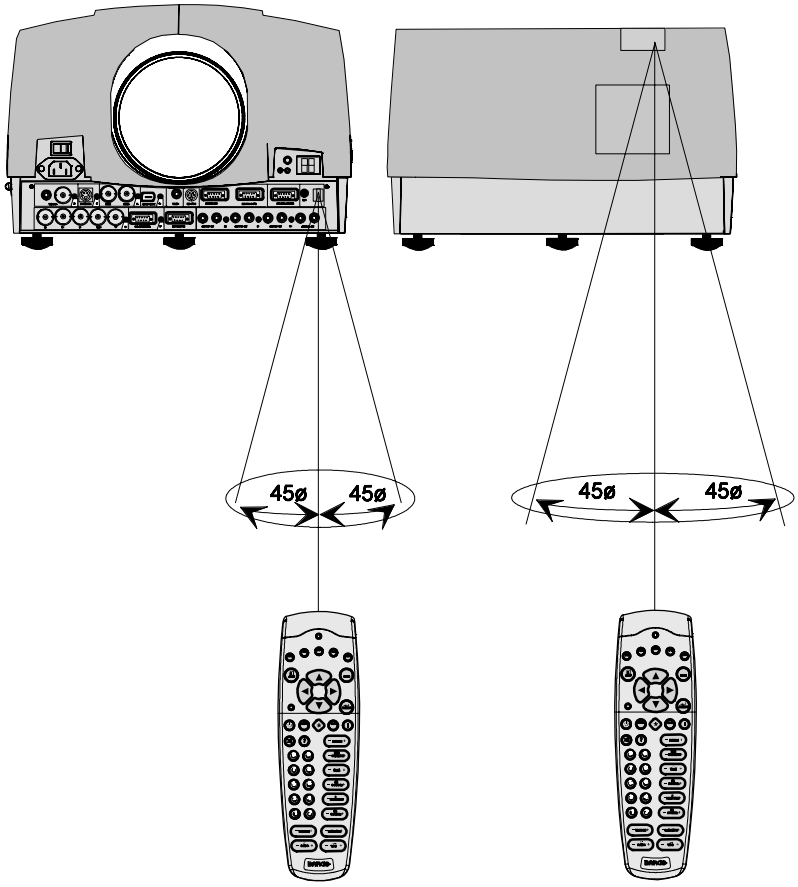

Image 4-6

4.5.3 Projector address

Overview

- Address setting
- Displaying and Programming addresses into the RCU

4.5.3.1 Address setting

Projector address

Address installed in the projector to be individually controlled.

Common address

Default address. Projector will always execute the command coming from a RCU programmed with that common address.

Why a projector address ?

As more than one projector can be installed in a room, the separate projector should be separately addressable with an RCU or computer. Therefor each projector has its own address.

Set up an individual Projector Address.

The set up of a projector address can be done via the software. .

Projector controlling.

Every projector requires an individual address between 0 and 255 which can be set in the *Installation* menu.

When the address is set, the projector can be controlled by :

- RCU for addresses between 0 and 9.
- computer, e.g. IBM PC (or compatible), Apple MAC, etc. for addresses between 1 and 255.

A projector will respond to a RCU set to the common address ’0’ regardless of what address is set in the projector itself (common address of projector should also be “0”).

The RCU is default programmed with address 0 , ’common address’.

If it is necessary to control a specific projector, then enter the projector address into the RCU (only when that address is between 0 and 9). The projector with the corresponding address will listen to that specific RCU.

Some projectors may operatre in domestic environments where other equipments may listen to the common address “0” , therefore the common address can also be set to “1”.

4.5.3.2 Displaying and Programming addresses into the RCU

Displaying the Projector Address on the Screen.

1. Press the **Address** key (recessed key on the RCU) with a pencil.

   The projector’s address will be displayed in a ’Text box’

To continue using the RCU with that specific address, it is necessary to enter the same address with the digit buttons (address between 0 and 9) within 5 seconds after pushing the address key. For example : if the Address key displays projector address 003, then press "3" digit button on the RCU to set the RCU’s address to match the projector’s address. Do not press 0–0–3 . This will address the remote control to ’0’ and control all projectors in the room. If the address is not entered within 5 seconds, the RCU returns to its default address (zero address) and controls the all projectors in the room.

Address 0 (or 1) should always allow communication with the projector since it is a common address.

4.5.4 Controlling the projector

Input Selection

Key in the corresponding slot number with the digit keys on the RCU. The selected source will be displayed.

Picture Controls

When an image control is pressed, a text box with a bar scale, icon and function name of the control, e.g. ’brightness...’ appears on the screen (only if *Textbox* in the Installation menu is ON). The length of the bar scale and the value of the numeric indication

indicate the current memorized setting for this source. The bar scale changes as the arrows on the RCU are pressed or the + or - buttons on the local keypad.

The picture settings are saved in the image file.

Image 4-7

Brightness	Use the + button for a higher brightness. Use the - button for a lower brightness.
Contrast	Use the + button for a higher contrast. Use the - button for lower contrast.
Color	Use the + button for richer colors. Use the - button for lighter colors.
Tint(Hue)	Tint is only active for Video and S-Video when using the NTSC 4.43 or NTSC 3.58 system. Use the + button Use the - button.
Sharpness	Use the + button for a sharper picture. Use the - button for a softer picture.
Phase	Use the + or - button to adjust the phase.
Gamma	Use the + button for a higher gamma Use the - button for a lower gamma
Freeze	Press **Freeze** to freeze the displayed image.

The Pause Key

When the Pause key is pressed, the image projection is stopped, a black screen will be displayed

To restart the image projection:

- Press **PAUSE** key
- Press **BACK** key
- Select a source number

4.5.5 Using the menu

Menu Layout

A grey line gives the transition between standard and advanced parameters.

The existence of a submenu is indicated by a white arrow, *Settings* is a submenu.

Keystone is an item of the *Image* menu.

Three suspension points indicate that the menuitem hides a dialogbox or a textbox.

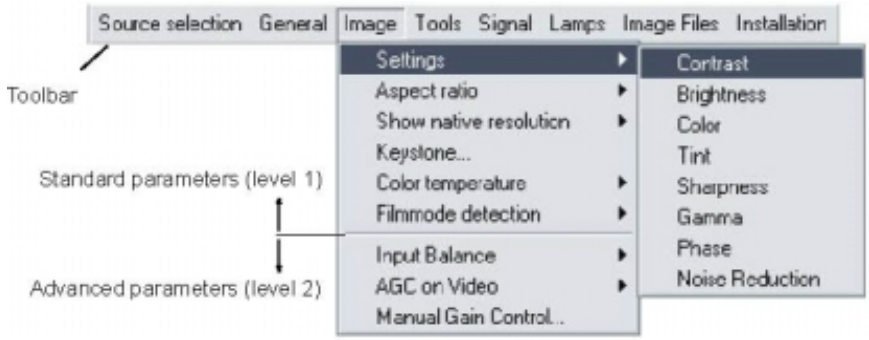

Image 4-8

The menus inserted in this manual are of the advanced type: all the items are visible The menus seen by a standard user on the screen will hence not correspond with the menus in the manual i.e. the advanced items will not be visible, they will be replaced with "*More...*"

Greyed out menus or items are not available in this software version

How to pull down a menu ?

1. Use ↓ to pull down a menu

How to pull down a submenu ?

1. Use → to pull down a submenu

How to exit the submenu ?

1. Press **BACK** to exit a submenu

Press MENU to exit the menu

When the menu has been exited for more than 1 minute, the advanced user password has to be re-entered.

4.5.6 Using the Dialogboxes

How to use the dialogboxes ?

Some parameters are modified by means of a dialogbox, where selections can be made and/or values can be entered, The values can be entered in several ways:

Entering numeric values using the numeric keys on the remote control

1. Press **ENTER** to activate the input field (image 4-9)
2. Key in the desired value

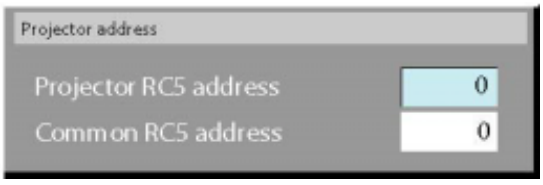

Image 4-9

Entering numeric values using the arrow keys on the remote control

1. Press **ENTER** to activate the input field,image 4-9
2. Press ←or → to select the digit to be changed (image 4-10)
3. Press ↓ or ↑ to increase or decrease the value

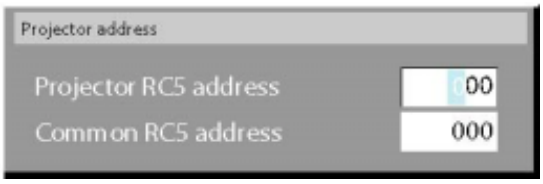

Image 4-10

Entering numeric values using the arrow keys on the local keypad

1. Press **ENTER** to activate the input fieldimage 4-9
2. Press ←or → to select the digit to be changed
3. Press ↓ or ↑ to increase or decrease the value

To confirm the changes always press ENTER.

Use ↓ or ↑ to browse between the different fields.

In some cases an alphanumeric value (file name, ...) has to be entered. Use ↑ or ↓ to scroll through the character values once the input field is activated

Following characters can be browsed in this particular order:

Decimal scroll list: 0123456789

Signed decimal scroll list: 0123456789-

ASCII scrolllist:ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789+-*/&@#.;.abcdefghijklmnopqrstuvwxyz

5. SOURCE SELECTION

Overview

- Source selection
- Composite Video
- S-Video selection

5.1 Source selection

Selecting a source

The Source selection menu allows to select one of the different sources. Another method to select an input source is via the remote control using the numeric keys or by using the local keypad.

How to select a source ?

1. Press **MENU** to activate the Toolbar
2. Press ↓ to Pull down the Source Selection menu
3. Use ↑ or ↓ to select one of the different sources (Press → to Pull down if the item has a submenu) (image 5-1)
4. Press **ENTER** to confirm your choice

   On the screen appears now the selected source.

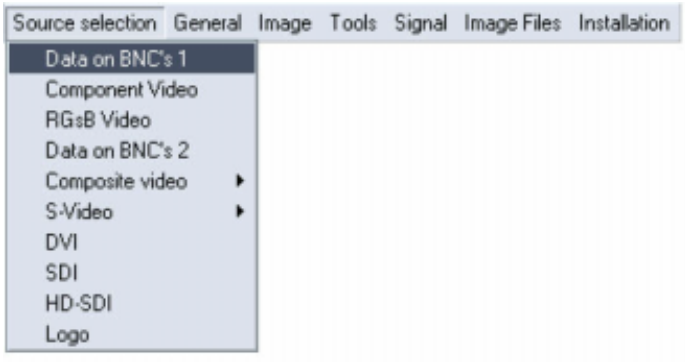

Image 5-1

A Barco logo on the menu indicates the presence of a signal.

The 3 first sources (Data on BNC's 1, Component Video & RG(s)B) refer to the first 5-cable input.

When to select "Data on BNC's 1"

Select Data on BNC's 1 when a data signal is connected to the BNC's labeled "1"

When to select "Component video" ?

Select Component video when a signal of the type (PR/Y/PB) is connected on the BNC's labeled "1".

When to select RG_sB Video ?

Select RG_sB Video when an RGB video signal with Sync on green or sync on H is presented on the BNC's labeled "1"

This signal is routed to the video circuit and is projected in a Video Window.

When to select "Data on RGB's 2"

Select Data on BNC's 2 when a data signal is connected to the BNC's labeled "2"

5.2 Composite Video

How to select one of the 2 composite video inputs ?

1. Press **MENU** to activate the Toolbar
2. Press ↓ to Pull down the Source Selection menu
3. Use ↑ or ↓ to select *Composite video*
4. Press → to Pull down the submenu
5. Use ↑ or ↓ to select one of the different video inputs (image 5-2)
6. Press **ENTER** to confirm your choice

   A white bullet indicates the selected composite video source which now appears on the screen.

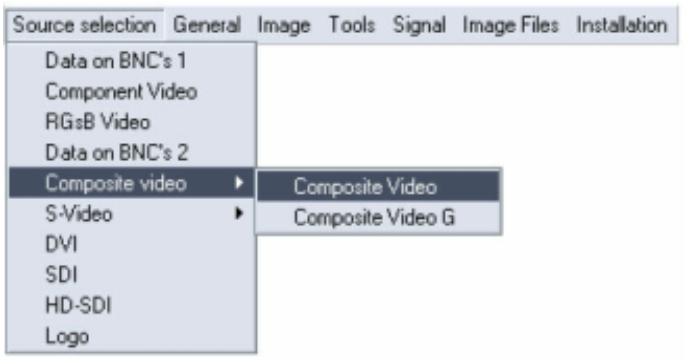

Image 5-2

The composite video source can also be selected using the numeric digit "3" on the local keypad and the RCU.

Pressing digit "3" on the RCU selects the composite video source selected in the composite video menu, image 5-2

5.3 S-Video selection

How to select one of the 2 S-Video inputs ?

1. Press **MENU** to activate the Toolbar
2. Press ↓ to Pull down the Source Selection menu
3. Use ↑ or ↓ to select *S-Video*
4. Press → to Pull down the submenu
5. Use ↑ or ↓ to select one of the different video inputs (image 5-3)
6. Press **ENTER** to confirm your choice

   A white bullet indicates the selected video source which now appears on the screen.

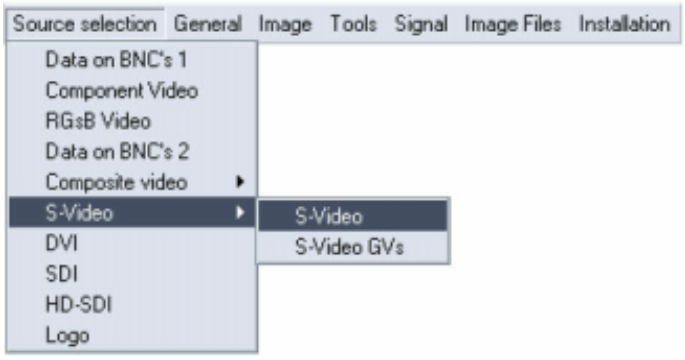

Image 5-3

The s-video source can also be selected using the numeric digit “4” on the local keypad and the RCU.

Pressing digit “4” on the RCU selects the S-Video source selected in the S-Video menu.

6. GENERAL MENU

Overview

- Pause
- Freeze
- Standby Timer
- Identification
- Runtimes
- History
- Reset runtime
- Runtime warning
- Lamp Dimming

6.1 Pause

How to interrupt the image projection ?

1. Press **MENU** to activate the Toolbar
2. Press → to select *General*
3. Press ↓ to Pull down the General menu
4. Use ↑ or ↓ to select *Pause* (image 6-1)
5. Press **ENTER** to activate the Pause function

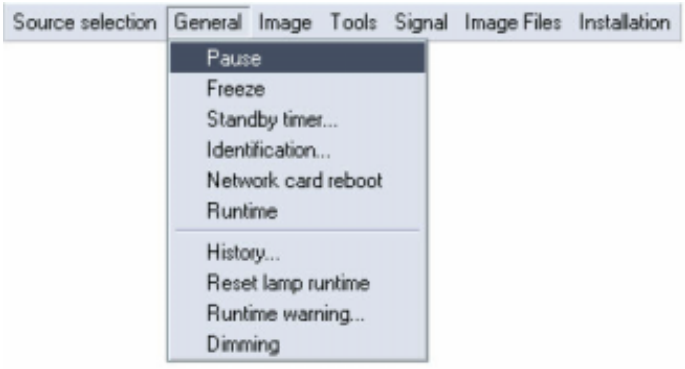

Image 6-1

Interrupting the image projection

With the Pause function, the selected source projection can be stopped.

The image projection can also be interrupted using the PAUSE key on the RCU.

To restart the image : press PAUSE, MENU, BACK or LOGO

6.2 Freeze

Freezing the image

With the Freeze function, the image can be frozen.To restart the image, reuse the Freeze function or press the **FREEZE** button on the remote.

How to freeze the image ?

1. Press **MENU** to activate the Toolbar
2. Press → to select *General*
3. Press ↓ to Pull down the General menu
4. Use ↑ or ↓ to select *Freeze* (image 6-2)
5. Press **ENTER** to activate the Freeze function

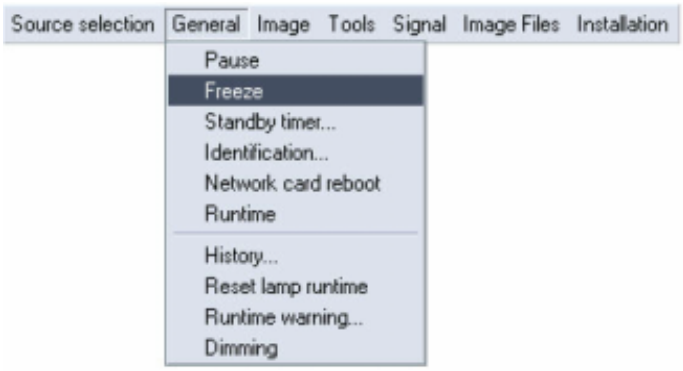

Image 6-2

The image can also be frozen using the FREEZE key on the RCU

6.3 Standby Timer

Purpose of the Standby Timer

If there is no signal, and the standby timer is enabled, a dialogbox is displayed and the projector will shut down after a determined time.

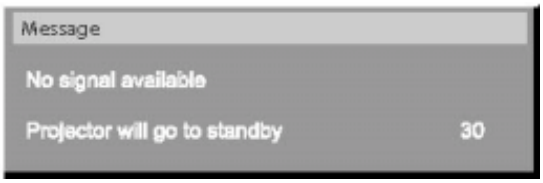

Image 6-3

The countdown time can be set in a dialog box in a range from 180 to 3600 seconds (default value = 300). The Timer can also be disabled.

How to enable the timer ?

1. Press **MENU** to activate the Toolbar
2. Press → to select *General*
3. Press ↓ to Pull down the General menu
4. Use ↑ or ↓ to select *Standby Timer* (image 6-4)
5. Press **ENTER** to activate the function

   On the screen appears a dialogbox (image 6-5)
6. Use ↑ or ↓ to select *Enabled,* a box surrounds the selected item, press **ENTER** to activate
7. Use ↑ or ↓ to browse to the input field
8. Use ←or→ , the numeric keys on the remote or the keypad to change the countdown setting
9. Press **MENU** or **BACK** to exit or to go back to the previous menu

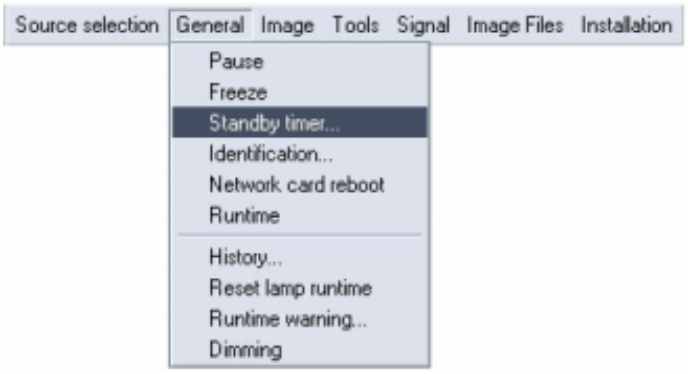

Image 6-4

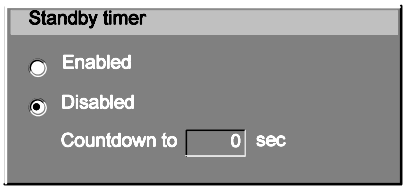

Image 6-5

6.4 Identification

The projector's identification screen

The identification screen displays the projector's main characteristics

How to display the identification screen ?

1. Press **MENU** to activate the Toolbar
2. Press → to select *General*
3. Press ↓ to Pull down the General menu
4. Use ↑ or ↓ to select *Identification* (image 6-6)
5. Press **ENTER** to activate the function

   On the screen appears a textbox. (image 6-7)
6. Press **MENU** or **BACK** to exit or to go back to the previous menu

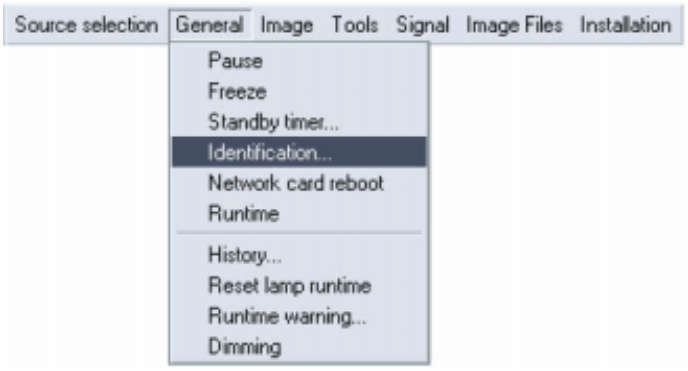

Image 6-6

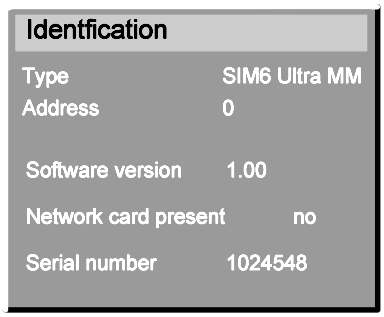

Image 6-7

6.5 Runtimes

How to display the lamp runtime ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *General* item
3. Press ↓ to Pull down the *General* menu
4. Use ↑ or ↓ to select *Runtime* (image 6-8)
5. Press **ENTER**

   A textbox is displayed (image 6-9)

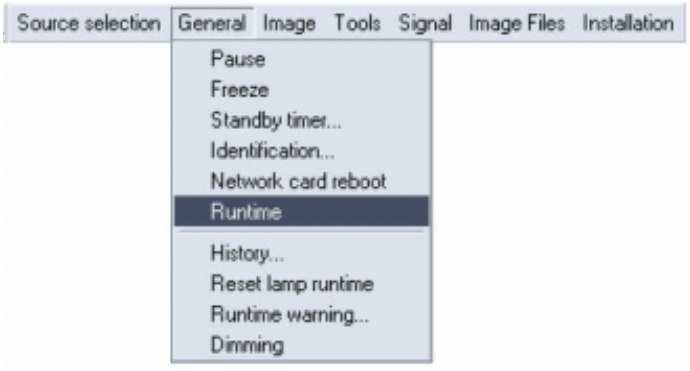

Image 6-8

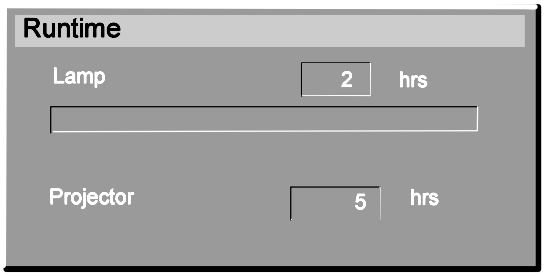

Image 6-9

6.6 History

How to view the history ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *General* item
3. Press ↓ to Pull down the *General* menu
4. Use ↑ or ↓ to select *History* (image 6-10)
5. Press **ENTER**

   A textbox is displayed (image 6-11)

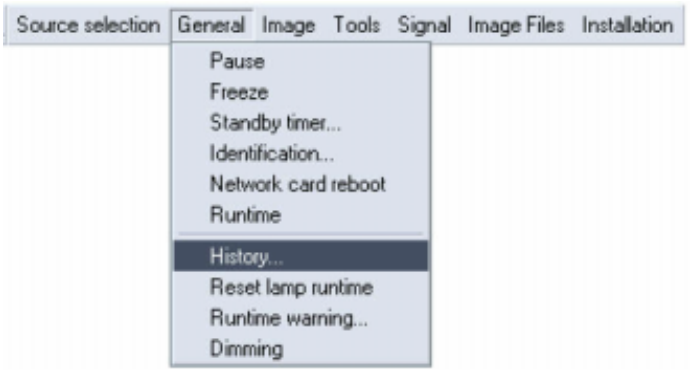

Image 6-10

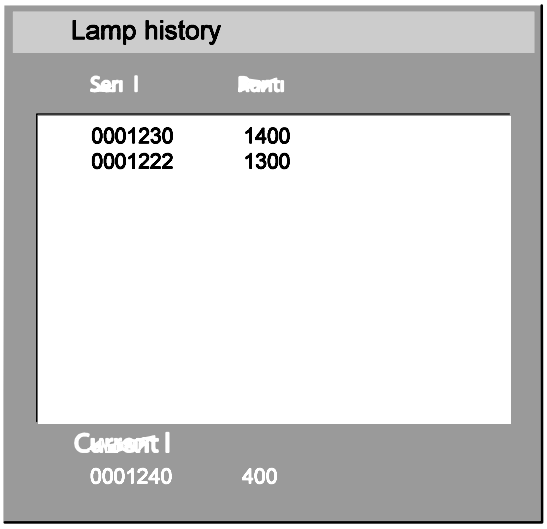

Image 6-11

6.7 Reset runtime

When to reset the lamp runtime ?

The lamp runtime should only be reset when placing a new lamp.

How to reset the lamp runtime ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *General* item
3. Press ↓ to Pull down the *General* menu
4. Use ↑ or ↓ to select *Reset runtime*
5. Press → to pull down the menu
6. Use ↑ or ↓ to select the lamp to be reset (image 6-12)
7. Press **ENTER**

   A dialogbox is displayed (image 6-13)
8. Use ←or →, the numeric keys on the remote, or the keypad to change the serial number of the lamp (serial number 0000000 will not be accepted).

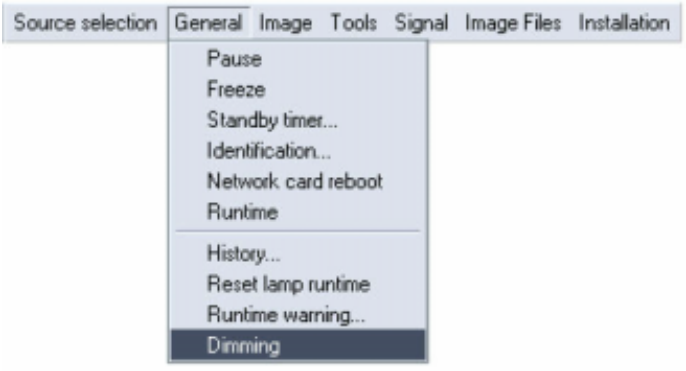

Image 6-12

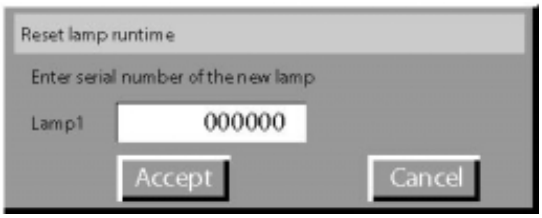

Image 6-13

Lamp runtime reset as well as the lamp replacement can only be done by a Barco authorized technician.

6.8 Runtime warning

What can be done ?

When the lamp has reached a certain predetermined runtime , a warning message will be displayed on the screen. The lamp runtime warning can be set in a range from 30 to 200 hours. The runtime warning is displayed by default at 30 hours before end of lamp lifetime.

How to set the lamp runtime warning?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *General* item
3. Press ↓ to Pull down the *General* menu
4. Use ↑ or ↓ to select *Runtime warning* (image 6-14)
5. Press **ENTER**

   A dialogbox is displayed (image 6-15)
6. Use ←or →, the numeric keys on the remote, or the keypad to change the runtime warning setting.

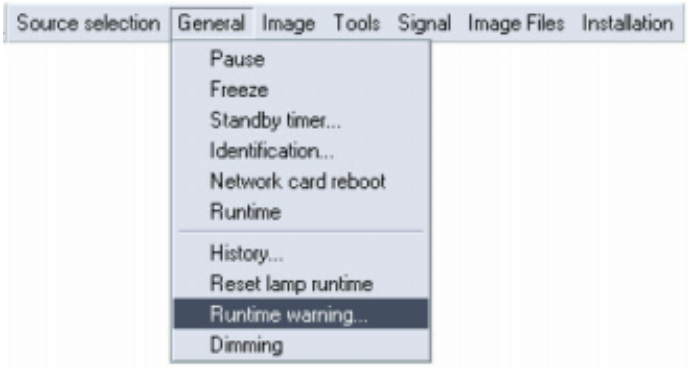

Image 6-14

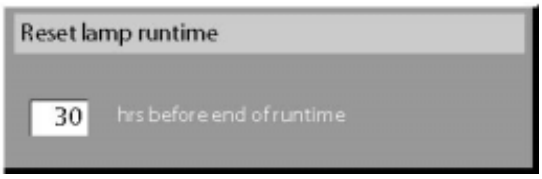

Image 6-15

Lamp runtime reset as well as the lamp replacement can only be done by a Barco authorized technician.

6.9 Lamp Dimming

What can be done?

The lamp can be dimmed via the lamp dimming feature.

Start Up

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Lamp* item
3. Press ↓ to Pull down the *Lamp* menu (image 6-16)
4. Use ↑ or ↓ to select *Dimming*
5. Press **ENTER**

   A dialogbox is displayed

   Select the desired lamp power (image 6-17)

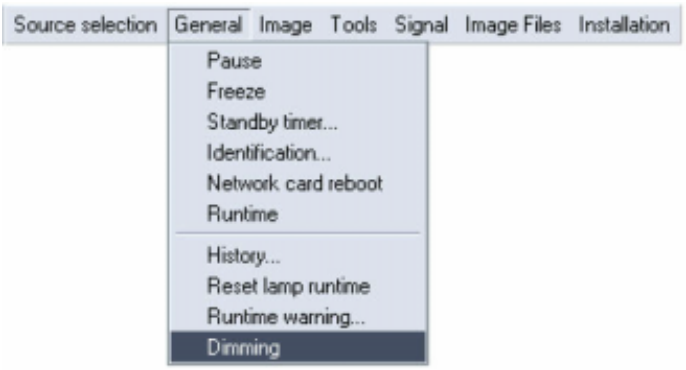

Image 6-16

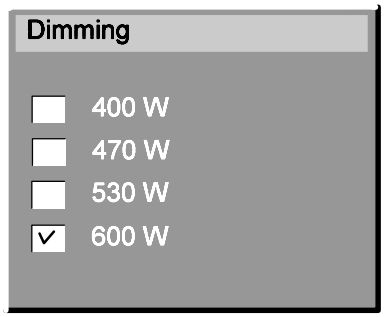

Image 6-17

A projector starts always with full lamp power.

7. IMAGE MENU

Overview

- Settings
- Aspect ratio
- Show native resolution
- Blanking
- Keystone
- Color temperature
- Filmmode detection
- Advanced settings
- Input balance
- AGC on Video
- Manual Gain Control

7.1 Settings

Overview

- Contrast
- Brightness
- Color
- Tint (hue)
- Sharpness
- Gamma
- Phase

What can be done ?

Correct image settings are important for a good image reproduction. The image settings are made through a dialogbox with a scrollbar. Minimal, maximal and actual values are indicated. These settings can also be done directly via the RCU's dedicated buttons, except for the sharpness.

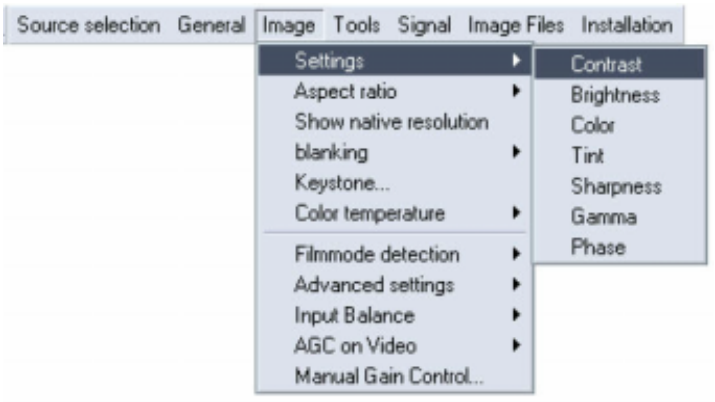

Image 7-1

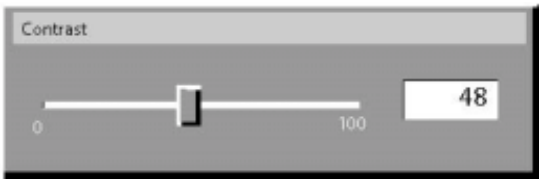

Image 7-2

7.1.1 Contrast

How to change the contrast

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image* item
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *settings*
5. Press → to pull down the menu
6. Use ↑ or ↓ to select *Contrast*
7. Press **ENTER**

   On the screen appears now a sliderbox
8. Use ←or → , the numeric keys on the remote, or the keypad to change the contrast

7.1.2 Brightness

How to change the Brightness ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image* item
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *settings*
5. Press → to pull down the menu
6. Use ↓ or ↑ to select *Brightness*
7. Press **ENTER**

   On the screen appears now a sliderbox
8. Use ←or → , the numeric keys on the remote, or the keypad to change the Brightness

7.1.3 Color

How to change the Color ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image* item
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *settings*
5. Press → to pull down the menu
6. Use ↓ or ↑ to select *Color*
7. Press **ENTER**

   On the screen appears now a sliderbox
8. Use ←or → , the numeric keys on the remote, or the keypad to change the Color

7.1.4 Tint (hue)

How to change the Tint ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image* item
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *settings*
5. Press → to pull down the menu
6. Use ↓ or ↑ to select *Tint*
7. Press **ENTER**

   On the screen appears now a sliderbox
8. Use ←or → , the numeric keys on the remote, or the keypad to change the Tint

7.1.5 Sharpness

How to change the sharpness ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image* item
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *settings*
5. Press → to pull down the menu
6. Use ↓ or ↑ to select *sharpness*
7. Press **ENTER**

   On the screen appears now a sliderbox
8. Use ←or → , the numeric keys on the remote, or the keypad to change the sharpness

7.1.6 Gamma

How to change the Gamma

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image* item
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *settings*
5. Press → to pull down the menu
6. Use ↓ or ↑ to select *Gamma*
7. Press **ENTER**

   On the screen appears now a sliderbox
8. Use ←or → , the numeric keys on the remote, or the keypad to change the Gamma

7.1.7 Phase

How to change the Phase ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image* item
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *settings*
5. Press → to pull down the menu
6. Use ↓ or ↑ to select *Phase*
7. Press **ENTER**

   On the screen appears now a sliderbox
8. Use ←or → , the numeric keys on the remote, or the keypad to change the Phase

7.2 Aspect ratio

What can be done ?

The aspect ratio setting forces the projector to project an image using a defined aspect ratio

- 4:3
- 16:9
- 5:4
- Auto

The Auto function calculates an aspect ratio based on the information stored in the image files.

Selecting Auto in case of a Video source may shrink the image horizontally

How to change the Aspect ratio ?

1. Press **MENU** to activate the Toolbar
2. Press → to select *Image*
3. Press ↓ to Pull down the *Image* menu (image 7-3)
4. Use ↑ or ↓ to select *Aspect ratio*
5. Press **ENTER** to confirm

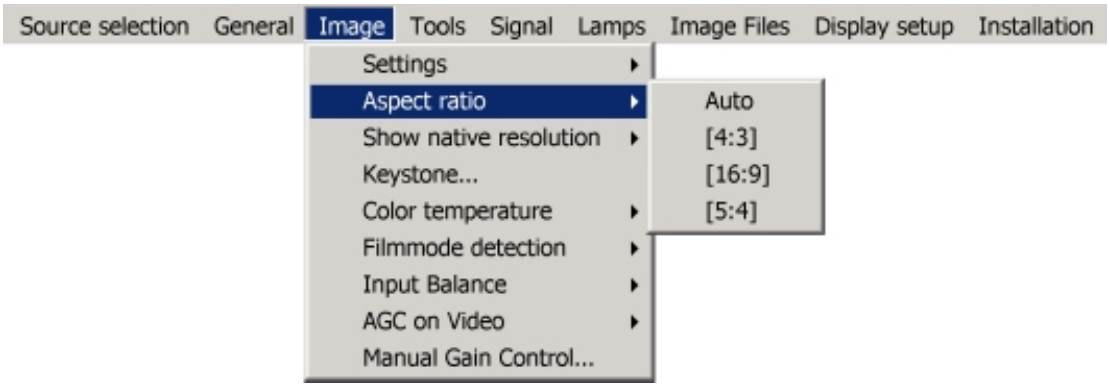

Image 7-3

7.3 Show native resolution

What can be done ?

The aim here is to always show the resolution of the source independently of the resolution of the LCD panels.

The “show native resolution” function will handle the sources as follows:

Source			**Projected image**		
Name	**Ratio**	**Resolution**	**Ratio**	**Resolution**	**Particularities** **Reality**
xga	4:3	1024x768	4:3	1024x768	image centered +side blanked
sxga	5:4	1280x1024	5:4	1280x1024	image centered +side blanked
sxga+	4:3	1400x1050	4:3	1400x1050	image centered +side blanked
uxga	4:3	1600x1200	4:3	1600x1200	image centered

Table 7-1
Show native resolution = ON in case of a BARCOREALITY SIM6 ULTRA MM projector

The *Full screen representation* function on the other hand forces to use the complete native resolution of the LCD panels,

How to enable the “Show native resolution” function?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image* item
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *Show native resolution* (image 7-4)
5. Press → to pull down the menu
6. Use ↓ or ↑ to select *On*
7. Press **ENTER**

   A white bullet shows the selection

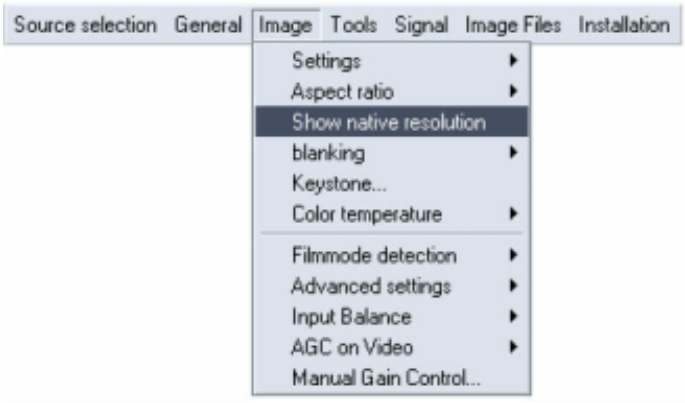

Image 7-4

The default mode is used if the *show native resolution* and the *full screen function* are off.

The default mode shows always the native ratio and forces the native resolution of the panels (part of the image blanked where needed)

7.4 Blanking

What can be done ?

Blanking adjustments affect only the edges of the projected image and are used to frame the projected image on to the screen and to hide or black out unwanted information (or noise). A ’0’ on the bar scale indicates no blanking.

Which blanking adjustments are available ?

- top blanking
- bottom blanking
- left blanking
- right blanking

How to blank ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image* item
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *Blanking* (image 7-5)
5. Press → to pull down the menu
6. Use ↓ or ↑ to select *left/right/up/down*
7. Press **ENTER**

   A white bullet shows the selection

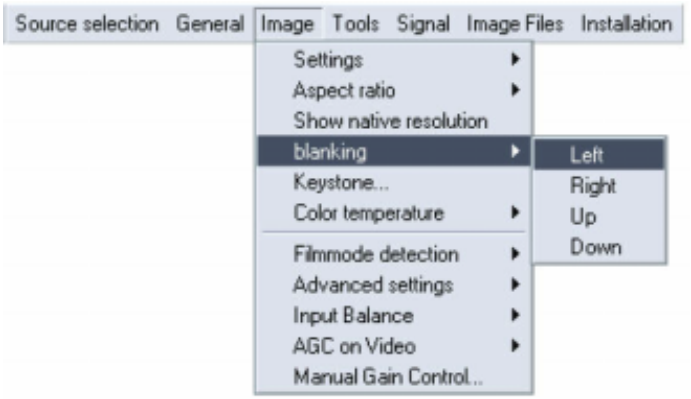

Image 7-5

7.5 Keystone

What can be done ?

The Keystone adjustment is used to align the image, this can be necessary when projecting under a non standard angle

How to perform a Keystone correction ?

1. Press **MENU** to activate the Toolbar
2. Press → to select *Image*
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *Keystone* (image 7-6)
5. Press **ENTER** to confirm

   A sliderbox is displayed . (image 7-7)

   Use ← or →, the numeric keys on the remote, or the keypad to adjust the keystone.

   The Top and bottom adjustments affect the image differently. (image 7-8, image 7-9)

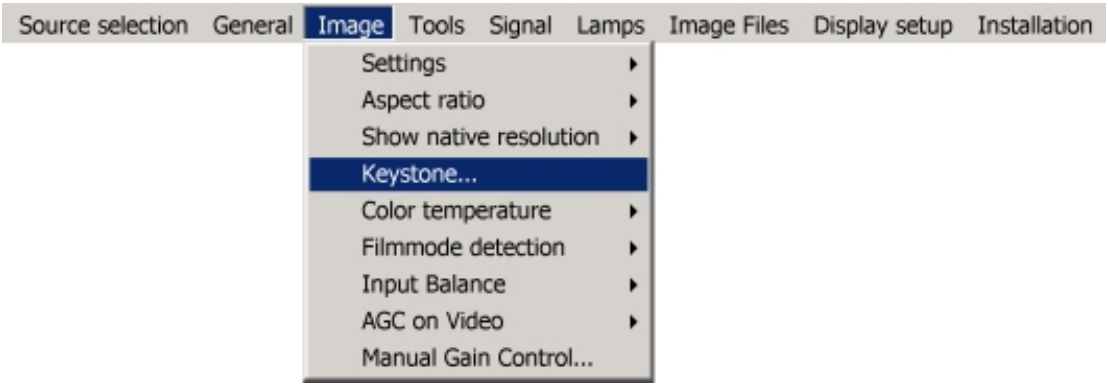

Image 7-6

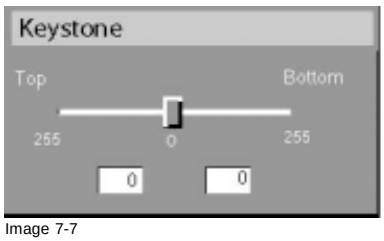

Image 7-7

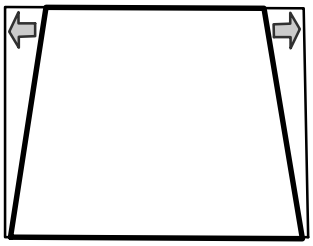

Image 7-8
Top adjustment of the keystone

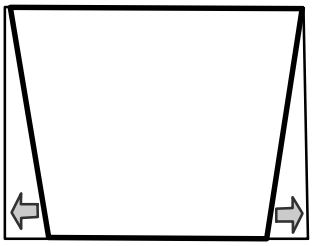

Image 7-9
Bottom adjustment of the keystone

7.6 Color temperature

What can be done ?

The color temperature can be selected according to the type of source:

There are 4 different preset color temperatures:

- Projector white
- computer : 9300 K
- Video : 6500 K
- Film : 5400 K
- Broadcast : 3200 K

These calibrated presets can be selected and will provide optimum color tracking, the projector allows however the setting of a personal color temperature, this is done in *custom*

How to select a preset color temperature ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image* item
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *Color temperature*
5. Press → to pull down the menu
6. Use ↓ or ↑ to select the desired preset color temperature
7. Press **ENTER**

   The color temperature of the image is adapted and a white bullet shows the active setting. (image 7-10)

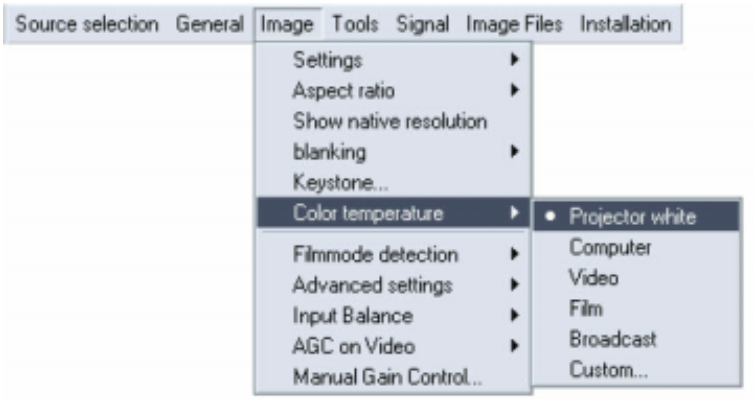

Image 7-10

How to start up the custom color temperature ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image* item
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *Color temperature*
5. Press → to pull down the menu
6. Use ↓ or ↑ to select *custom*
7. Press **ENTER**

   A sliderbox for the red custom setting is displayed as well as a wizard textbox in the lower part of the screen. (image 7-11)

   Follow the instructions on the wizard textbox. (image 7-12)

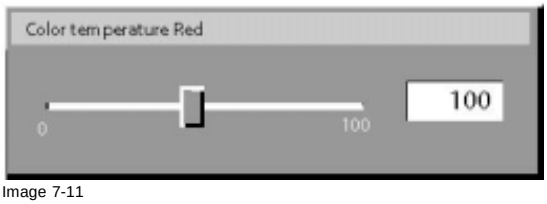

Image 7-11

Image 7-12

7.7 Filmmode detection

What can be done ?

Some sources like common DVD material are derived from cinema 24 Hz sources (2/2 or 3/2 pull down method).

The filmmode detection insures that these converted signals are shown without artefacts.

This function may cause undesired effects on standard sources, therefore it can be disabled (OFF) at any time

Enabling/disabling the filmmode detection

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image* item
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *Filmmode detection*
5. Press → to pull down the menu
6. Use ↓ or ↑ to enable or disable the Filmmode detection
7. Press **ENTER**

   A white bullet shows the active setting (image 7-13)

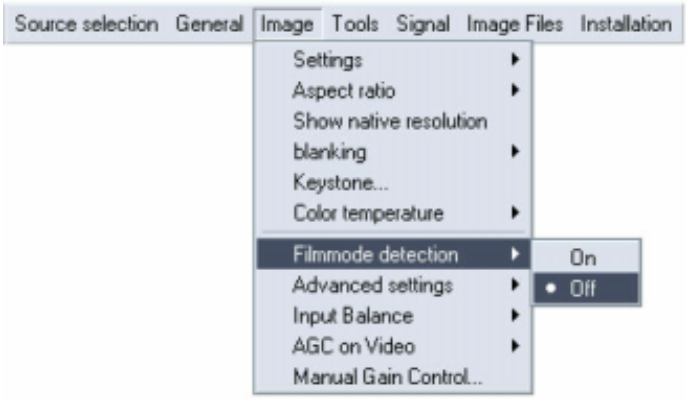

Image 7-13

7.8 Advanced settings

7.8.1 Noise reduction

How to change the Noise reduction ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image* item
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *settings*
5. Press → to pull down the menu
6. Use ↓ or ↑ to select *Noise reduction*
7. Press **ENTER**

   On the screen appears now a sliderbox
8. Use ←or → , the numeric keys on the remote, or the keypad to change the Noise reduction setting.

7.8.2 Dynamic color depth

What can be done ?

By adapting Chrominance in relation to luminance, color contrast can be adapted.

How to change the Dynamic color depth ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image* item
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *advanced settings*
5. Press → to pull down the menu
6. Use ↓ or ↑ to select *Dynamic color depth*
7. Press **ENTER**

   On the screen appears now a sliderbox
8. Use ←or → , the numeric keys on the remote, or the keypad to change the Dynamic color depth setting.

7.9 Input balance

This procedure is reserved to Barco authorized technicians only.

7.10 AGC on Video

AGC

Automatic Gain Control: allows an automatic amplitude (gain) control of the incoming video signal

Enabling/disabling the AGC

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image* item
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *AGC on Video*
5. Press → to pull down the menu
6. Use ↓ or ↑ to enable or disable the AGC
7. Press **ENTER**

   A white bullet shows the active setting

7.11 Manual Gain Control

What can be done ?

Beside the AGC there is the possibility to manually set the gain of the incoming video signal. When the AGC is enabled (ON), the manual setting does not affect the gain, AGC must therefore be disabled. The manual gain control must be done on an external pattern with white areas (grey scale bar pattern)

How to set the Manual Gain Control ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image* item
3. Press ↓ to Pull down the *Image* menu
4. Use ↑ or ↓ to select *Manual Gain Control*
5. Press **ENTER**

   A scrollbar is displayed (image 7-14)
6. Use ← or →, the numeric keys on the remote, or the keypad to change the gain so as to obtain homogene white parts in the image.

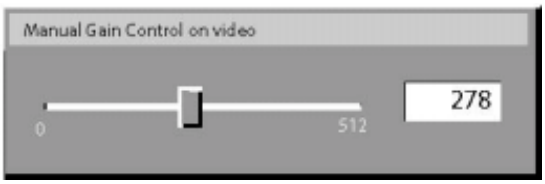

Image 7-14

8. TOOLS MENU

Overview

- Introduction to PiP
- PiP select
- PiP add window
- PiP remove window
- PiP layout
- PiP Adjust
- Diagnostics

8.1 Introduction to PiP

PiP

PiP stands for "Picture in Picture" and allows to display multiple windows containing each of them an image. The windows may be of the video or data type.

What are the different possibilities within the PiP mode ?

The input section of the projector allows a multitude of combinations of different input signals which may be projected in the 2 windows of the PiP screen.

The PiP mode allows independent settings for each window:

- Image settings : contrast, brightness, tint, color,...
- Vertical and horizontal shift of each window all over the screen
- Resizing of the window
- Digital Zoom

What are the different PiP configurations ?

- Full screen[1]

  The full screen is used to display one of the selected sources.
  Browsing through the sources is possible with the **PiP Adjust** button on the remote.

- Video in Data[1]

  The screen is divided into 2 subscreens the video subscreen is placed on the data subscreen.

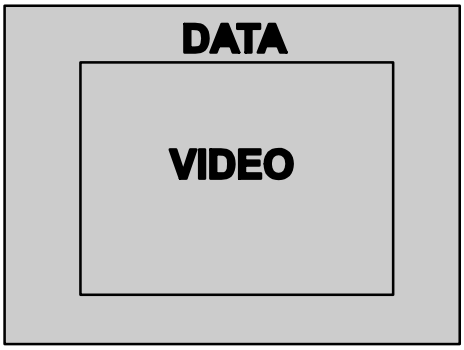

Image 8-1

- Data in Video[1]

  The screen is divided into 2 subscreens the data subscreen is placed on the video subscreen.

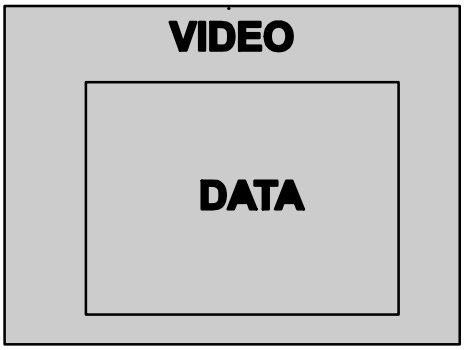

Image 8-2

- PiP layout 1–3 [2]

  These are factory layouts, they can be edited and saved.

- Personal layouts

  Beside the 2 fixed layouts and the 3 factory layouts, one can set 5 additional (personal) layouts.

1. fixed layout
2. factory layouts

PiP dedicated buttons

- **PiP Adjust :** this button allows to focus on one particular window, this is shown with a white frame surrounding the selected window.
  A source identification box is displayed in the right lower corner.
  Pressing the button removes the frame to the next window. This can also be done via *PiP Adjust* in the Tools menu

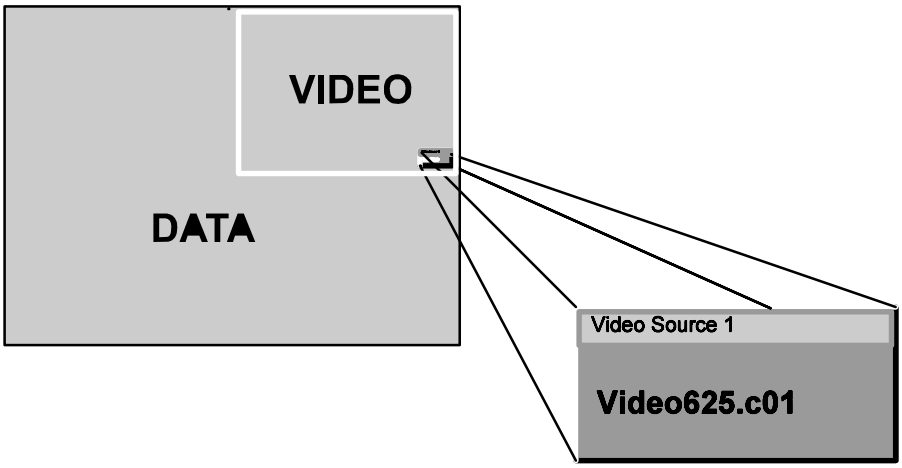

Image 8-3

- **PiP:** this button allows to browse through the different configurations, it has the same function as *PiP select* in the Tools menu.

8.2 PiP select

How to change the PiP configuration ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Tools* item
3. Press ↓ to Pull down the *Tools* menu
4. Use ↑ or ↓ to select *PiP select*
5. Press → to pull down the menu
6. Use ↑ or ↓ to select the desired configuration
7. Press **ENTER**

   A white bullet shows the active layout

The PiP configuration can also be selected via the dedicated PiP key on the RCU.

8.3 PiP add window

What can be done ?

It is possible to add a window to the existing windows, therefore a source must be selected.

Sources which are already used are unselectable. If for instance the PiP layout contains a component video then component video will be unselectable.

Once added, the window may be altered in several ways to meet particular needs:

- repositioning
- resizing
- changing the order

How to add a window ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Tools* item
3. Press ↓ to Pull down the *Tools* menu
4. Use ↑ or ↓ to select *PiP add window* (image 8-4)
5. Press **ENTER**

   The source selection menu is displayed

   In the lower part of the screen appears a wizard in 4 steps (image 8-5)

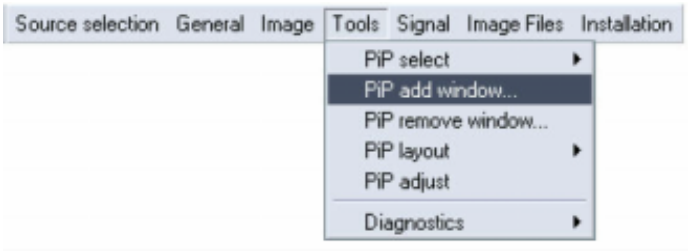

Image 8-4

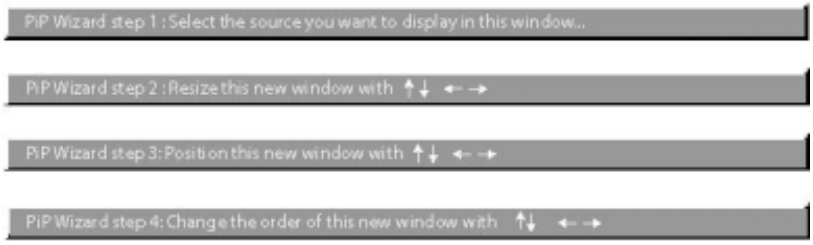
PiP Wizard step 1 : Select the source you want to display in this window...
PiP Wizard step 2 : Resize this new window with
PiP Wizard step 3: Position this new window with
PiP Wizard step 4: Change the order of this new window with

Image 8-5

8.4 PiP remove window

How to remove a window ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Tools* item
3. Press ↓ to Pull down the *Tools* menu
4. Use ↑ or ↓ to select *PiP remove window* (image 8-6)
5. Press **ENTER**

   In the lower part of the screen appears a wizard. (image 8-7)

   The selected window appears surrounded with a white frame, each hit on **PiP ADJUST** will move the frame along the different windows.

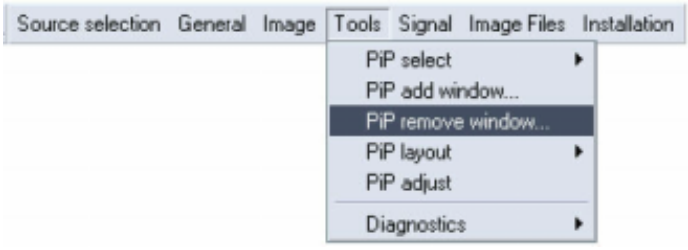

Image 8-6

Image 8-7

8.5 PiP layout

Overview

- PiP Save
- PiP rename layout
- PiP delete layout

8.5.1 PiP Save

What can be done ?

The active layout can be saved or "saved as".

When a new layout is saved it is added to the *PiP select* menu.

A fixed layout can be edited (resizing, repositioning,...) but it can not be saved under its original name.

How to save a layout ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Tools* item
3. Press ↓ to Pull down the *Tools* menu
4. Use ↑ or ↓ to select *PiP layout*
5. Press → to pull down the menu
6. Use ↑ or ↓ to select *PiP save* or *save as* (image 8-8)
7. Press **ENTER**

   If *save as* has been selected, a dialogbox is displayed (image 8-9)

   Use ← or →, the numeric keys on the remote, or the keypad to enter the name and exit with **BACK** or **MENU**.

   If *save* has been selected, a messagebox is displayed (image 8-10)

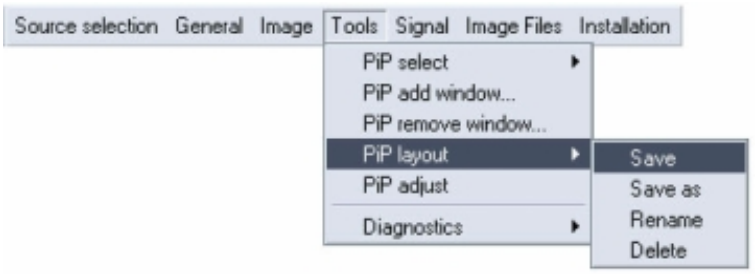

Image 8-8

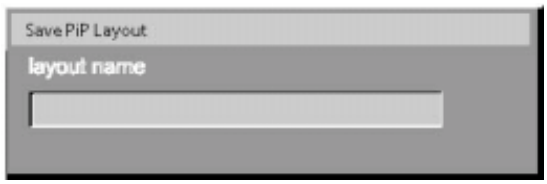

Image 8-9

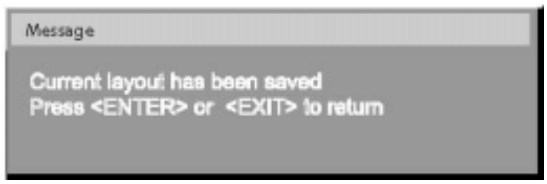

Image 8-10

8.5.2 PiP rename layout

What can be done ?

The non fixed layouts (factory and personal layouts) can be renamed .

The maximal length of the name is 12 characters.

A fixed layout can not be renamed

How to rename a layout ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Tools* item
3. Press ↓ to Pull down the *Tools* menu
4. Use ↑ or ↓ to select *PiP layout*
5. Press → to pull down the menu
6. Use ↑ or ↓ to select *Rename*
7. Press **ENTER**

   A dialogbox is displayed (image 8-11)
8. Use ↑ or ↓ to select the layout to be renamed
9. Press **ENTER**

   A dialogbox is displayed (image 8-12)

   Use ← or →, the numeric keys on the remote, or the keypad to enter the name and exit with **BACK** or **MENU**.

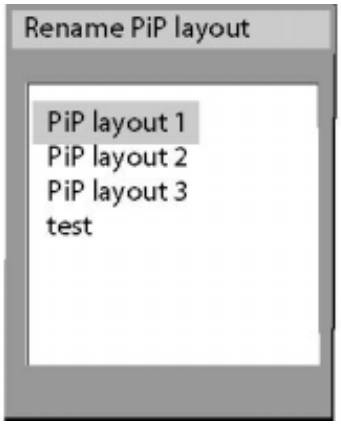

Image 8-11

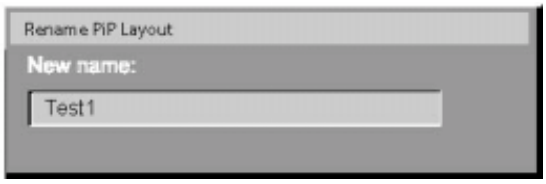

Image 8-12

8.5.3 PiP delete layout

What can be done ?

The non fixed layouts (factory and personal layouts) can be deleted.

The fixed layouts and the active layout can not be deleted

How to delete a layout ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Tools* item
3. Press ↓ to Pull down the *Tools* menu
4. Use ↑ or ↓ to select *PiP layout*
5. Press → to pull down the menu
6. Use ↑ or ↓ to select *Delete*
7. Press **ENTER**

   A dialogbox is displayed (image 8-13)
8. Use ↑ or ↓ to select the layout to be renamed
9. Press **ENTER**

   The layout is deleted and disappears from the dialogbox

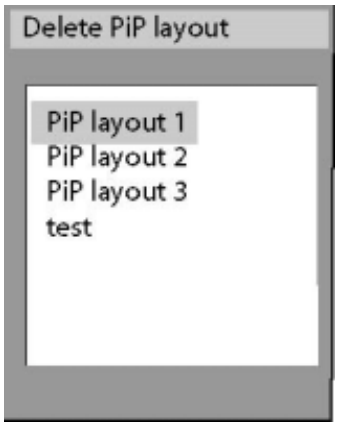

Image 8-13

8.6 PiP Adjust

What can be done ?

PiP adjust allows to browse through the windows in the active layout, a white frame indicates the window which has the focus.

This way, independent settings (picture settings, ...) are possible for each window.

This can also be done by using the dedicated PiP Adjust key on the RCU

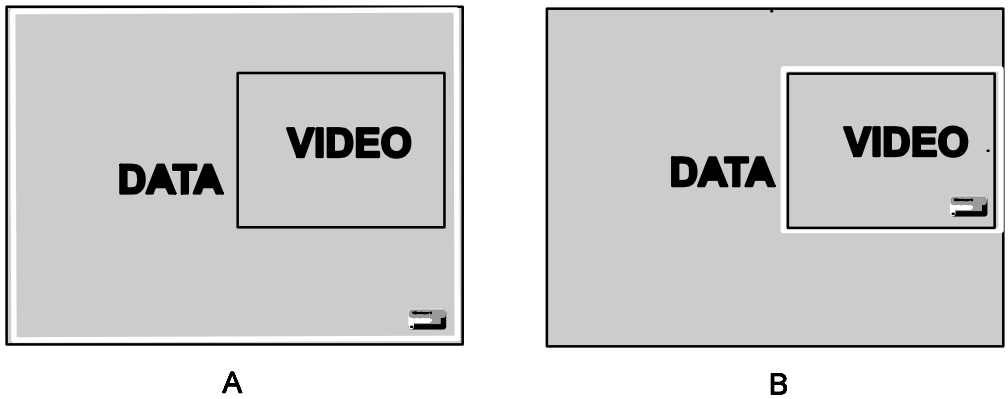

Image 8-14

A the data window has the focus
B the video window has the focus

PiP adjust

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Tools* item
3. Press ↓ to Pull down the *Tools* menu
4. Use ↑ or ↓ to select *PiP Adjust* (image 8-15)
5. Press **ENTER**

   The focus moves to the next window

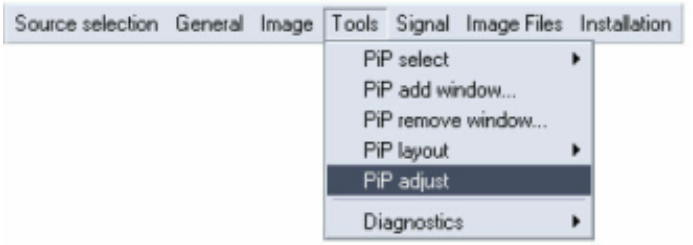

Image 8-15

8.7 Diagnostics

What can be done ?

The I²C bus allows the diagnostic of different hardware components

How to display the diagnostics menu ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Tools* item
3. Press ↓ to Pull down the *Tools* menu
4. Use ↑ or ↓ to select *Diagnostics* (image 8-16)
5. Press → to pull down the menu
6. Press **ENTER** to select I²C

   A textbox is displayed

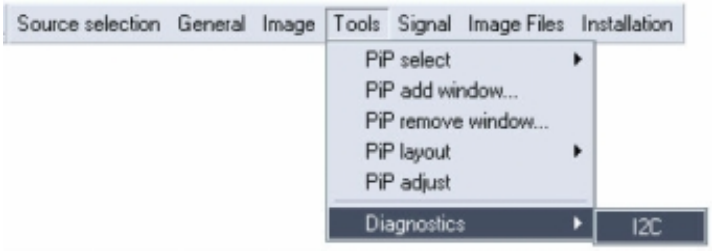

Image 8-16

9. SIGNAL MENU

Overview

- Switching mode
- Background

9.1 Switching mode

Switching from one source to another

To minimize undesired effects when switching from one source to another, one can use the Seamless switching mode, beside Seamless switching there is a wide choice of several effects which render the source switching transitions more enjoyable.

How to select a switching mode ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Signal* item
3. Press ↓ to Pull down the *Signal* menu
4. Use ↑ or ↓ to select *Switching mode*
5. Press → to pull down the menu
6. Use ↑ or ↓ to select the desired switching mode (image 9-1)
7. Press **ENTER**

   A white bullet shows the active effect.

   The next source switching will be done using the selected effect

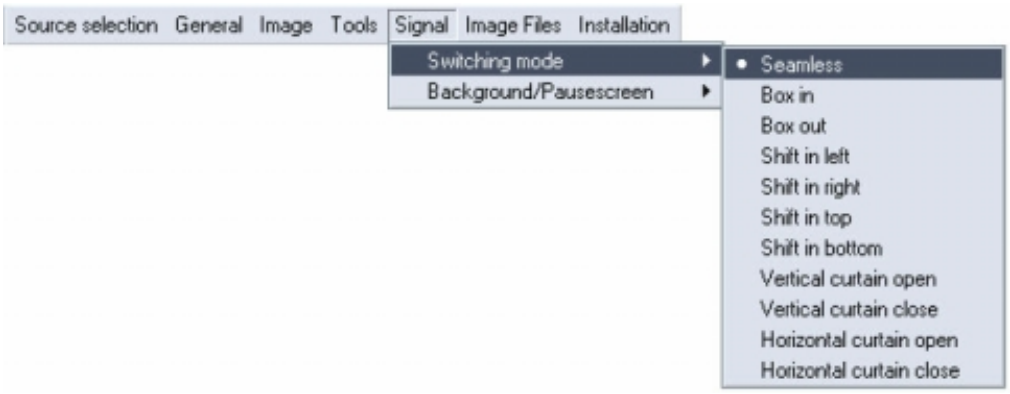

Image 9-1

9.2 Background

Purpose

If there is no signal connected to the projector, the background will be a logo, a black or a blue screen depending on the *background* settings.

How to change the background ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Signal* item
3. Press ↓ to Pull down the *Signal* menu
4. Use ↑ or ↓ to select *Background*
5. Press → to pull down the menu
6. Use ↑ or ↓ to select the desired background (image 9-2)
7. Press **ENTER**

Image 9-2

10. IMAGE FILES MENU

Overview

- Load file
- Edit file
- Rename file
- Copy
- Delete

Introduction to image files

An image files contains the main characteristics of a source (number of active lines,...). The projector's memory contains a list of files corresponding to the most common sources, these are the standard files (file extension = *.s). When a new source corresponds to one of these files, a custom file (file extension =*.C) is created and saved for future use.

When there is a little difference, the file can also be loaded and then edited until the source specs are reached.

The AutoImage function creates automatically the best suited image file (custom file) for a new source. AutoImage is used when:

- a new source is detected : AutoImage creates a new custom file which can always be edited if necessary.

- the AutoImage button on the RCU is pressed

AutoImage works only in full screen mode

If the AutoImage function does not succeed in finding a file and no file is loaded (load list is empty), which means that the source is not displayed, then use the *copy* function,

10.1 Load file

How to load a file ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image files* item
3. Press ↓ to Pull down the *Image files* menu
4. Use ↑ or ↓ to select *Load* (image 10-1)
5. Press **ENTER**
   A dialogbox is displayed (image 10-2)
6. Use ↑ or ↓ to select the desired file
   Tip: *For more info about the available image files and the specifications, see appendix B*
7. Press **ENTER**

   The file is loaded and the image is adapted.

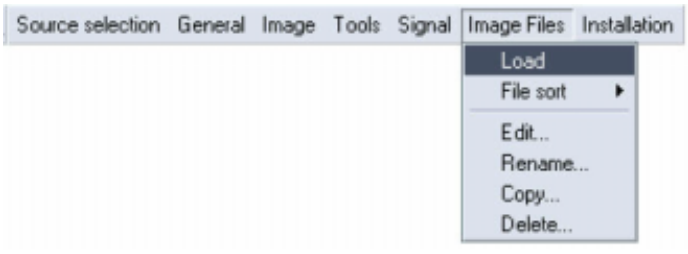

Image 10-1

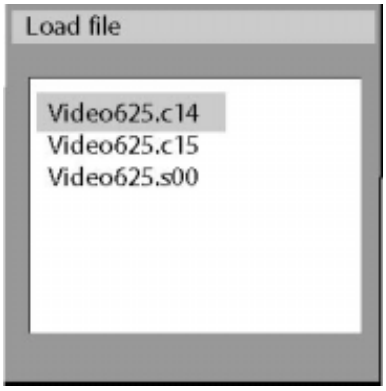

Image 10-2

In PiP mode, the files which may be loaded will be of the data type if the active window is a data window, or they will be of the video type if the active window is a video window.

What to do if the image is not perfect ?

If the displayed image is not correct after AutoImage or after selecting the best fitting file, go to the Edit menu, select the active file and change the settings.

10.2 Edit file

What can be done with the Edit file menu ?

The Edit file menu makes it possible to change the settings of the file according to the real settings of the connected source. Consult the source specifications before entering the data.

How to edit a file ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image files* item
3. Press ↓ to Pull down the *Image files* menu
4. Use ↑ or ↓ to select *Edit* (image 10-3)
5. Press **ENTER**
   A dialogbox is displayed
6. Use ↑ or ↓ to select the desired file
   Note: *If in PiP mode, the cursor is placed by default on the active file which has the focus.*
7. Press **ENTER**

   A dialogbox is displayed (image 10-4)
8. Press **ENTER**

   A dialogbox is displayed (image 10-5)
9. Use ←or →, the numeric keys on the remote, or the keypad to edit and change the values, confirm with ENTER
   Note: *greyed out fields can not be updated (total pixels)*

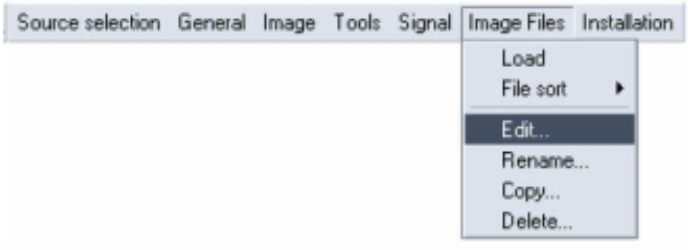

Image 10-3

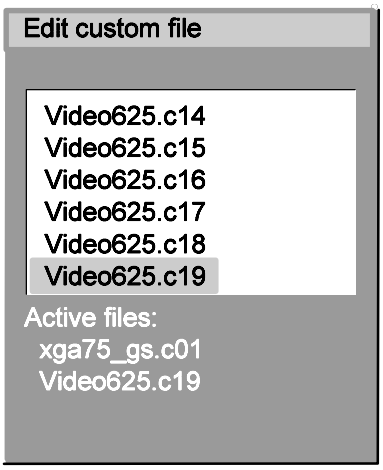

Image 10-4

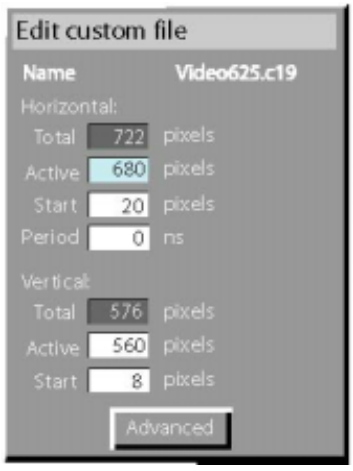

Image 10-5

Which items can be adjusted ?

The following items can be adjusted :

- Active horizontal pixels
- Horizontal start in pixels
- Horizontal period in ns
- Active vertical lines
- Vertical start in lines

Advanced video settings

The **advanced** button enables the advanced settings for a video source.

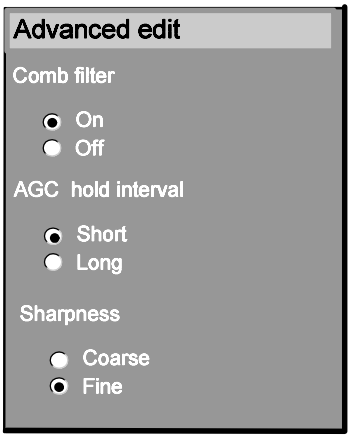

Image 10-6

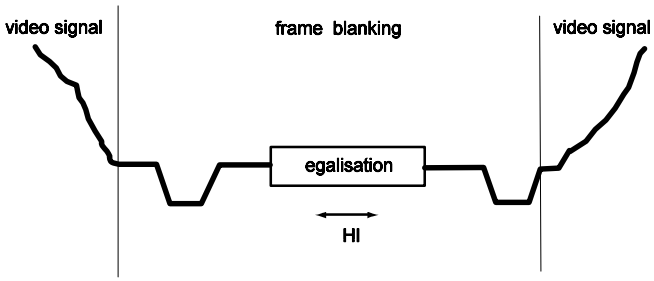

Image 10-7
HI AGC Hold interval

The **Comb filter** is by default enabled.

The **AGC hold interval** is the time interval in which the AGC is inhibited (AGC hold = no update in video amplitude measurement), the advanced parameter allows to choose a short or long hold interval.

A long AGC hold interval eliminates Macrovision® disturbances since the AGC is hold during a long interval, thus reducing the probability to encounter a Macrovision® pulse.

Sharpness adjustment can be chosen to be coarse or fine.

It is recommended to use the default values.

Advanced Data settings

The **advanced** button enables the advanced settings for a data source.

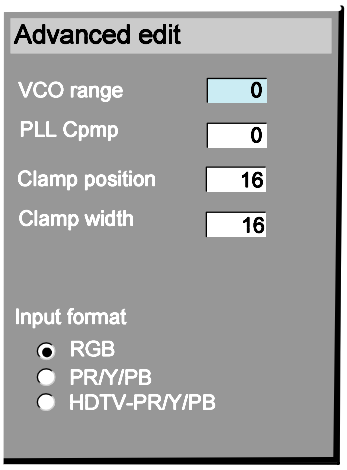

Image 10-8

The **VCO range** setting determines the frequency range of the VCO (Voltage Controlled Oscillator).

The **Cpmp** (Charge pump current) sets the low pass filter current.

Both VCO range & Cpmp are set by the image file, changing these settings is only indicated in for special purposes.

The input format settings are used to "tell more" about the signals connected on the BNC's, it completes the information in the source selection menu.

It is recommended to use the default values.

10.3 Rename file

How to rename a file ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image files* item
3. Press ↓ to Pull down the *Image files* menu
4. Use ↑ or ↓ to select *Rename* (image 10-9)
5. Press **ENTER**
   A dialogbox is displayed (image 10-10)
6. Use ↑ or ↓ to select the desired file
7. Press **ENTER**

   A textbox is displayed (image 10-11)

   Use ←or →, ↓ or ↑ the numeric keys on the remote, or the keypad to edit and change the values, confirm with ENTER.

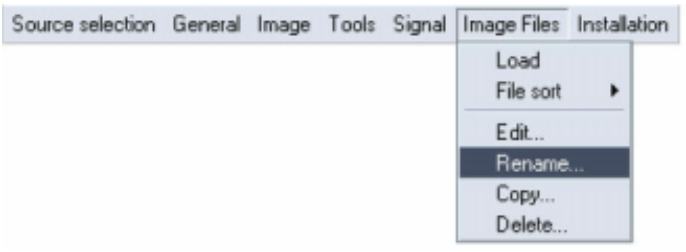

Image 10-9

Image 10-10

Image 10-11

10.4 Copy

How to copy a file ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image files* item
3. Press ↓ to Pull down the *Image files* menu
4. Use ↑ or ↓ to select *copy* (image 10-12)
5. Press **ENTER**
   A dialogbox is displayed (image 10-13)
6. Use ↑ or ↓ to select the desired file
7. Press **ENTER**

   A textbox is displayed (image 10-14)

   Use ←or →, ↓ or ↑ on the remote, or the keypad to enter the new name, confirm with **ENTER**.

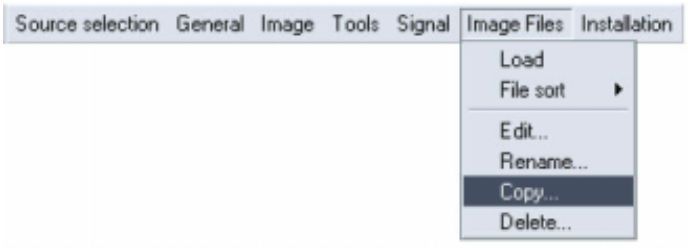

Image 10-12

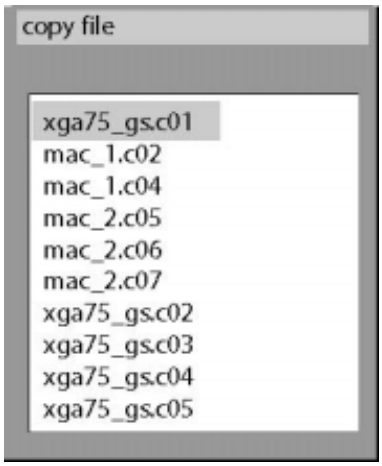

Image 10-13

Image 10-14

If the AutoImage function does not succeed in finding a file and no file is loaded (load list is empty), which means that the source is not displayed, then use the *copy* function: Copy a standard file (.std) which is not too different of the source to display, then edit this file to get the best image.

10.5 Delete

How to delete a file ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Image files* item
3. Press ↓ to Pull down the *Image files* menu
4. Use ↑ or ↓ to select *delete* (image 10-15)
5. Press **ENTER**
   A dialogbox is displayed (image 10-16)
6. Use ↑ or ↓ to select the desired file
7. Press **ENTER**

   The selected file is deleted and is removed from the list

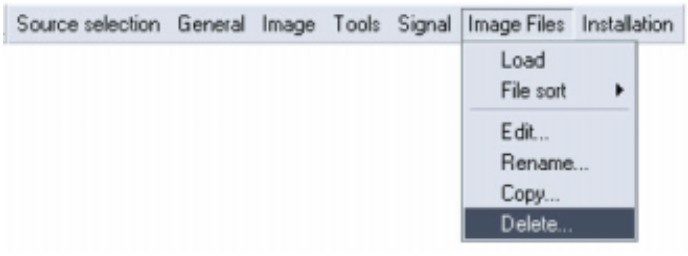

Image 10-15

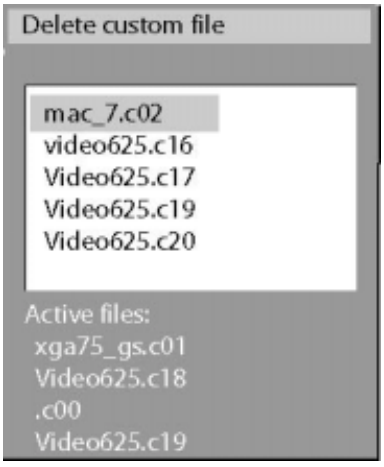

Image 10-16

11. INSTALLATION MENU

Overview

- Lens adjustments
- Projector address
- Orientation
- Full screen representation
- Language
- Quick access keys
- RS232 baudrate
- Centered menu
- Startup screen
- Take screenshot
- Sliderbox position
- AutoImage Setup
- Change password
- Auto file load

11.1 Lens adjustments

What can be done ?

Motorized lenses can be adjusted in the installation menu or via the dedicated keys on the remote.

The following parameters can be adjusted:

- Zoom
- Focus
- horizontal shift
- vertical shift : range: -15% to 120 %

How to Zoom/focus or shift ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Installation*
3. Press ↓ to Pull down the *Installation* menu
4. Use ↑ or ↓ to select *Lens adjustment* (image 11-1)
5. Press **ENTER**

   A textbox appears on the screen, follow the instructions. (image 11-2, image 11-3)

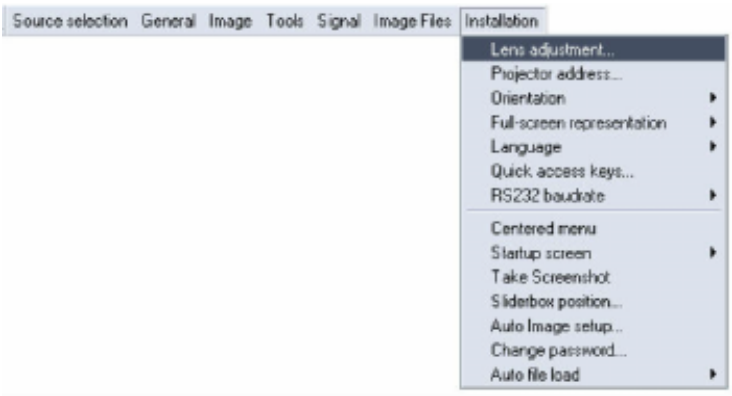

Image 11-1

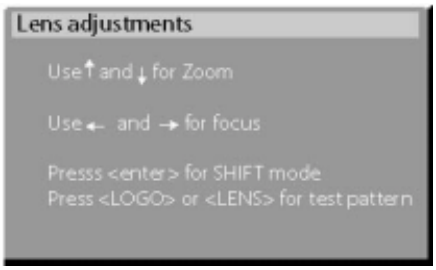

Image 11-2

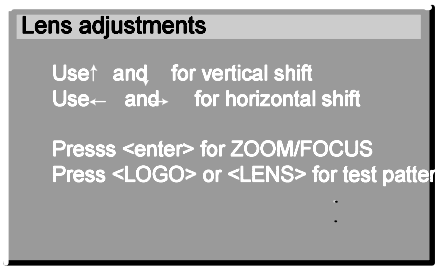

Image 11-3

A vertical shift above 100% is not recomended in case of high resolution data signals.

11.2 Projector address

What can be done ?

In some cases the projector address must be changed, for example if an unique RCU is used to control 2 or more projectors.

The projector address setting on the projector must match the setting on the RCU.

What can be changed ?

Within the 'Change Projector Address' menu, the following items can be changed

- Projector address: address defined by the user, may be from 0 to 255
- Common address : address may be 0 or 1

How to change the projector's RC5 address ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Installation*
3. Press ↓ to Pull down the *Installation* menu
4. Use ↑ or ↓ to select *Projector address* (image 11-4)
5. Press **ENTER**

   A dialogbox appears on the screen. (image 11-5, image 11-6)

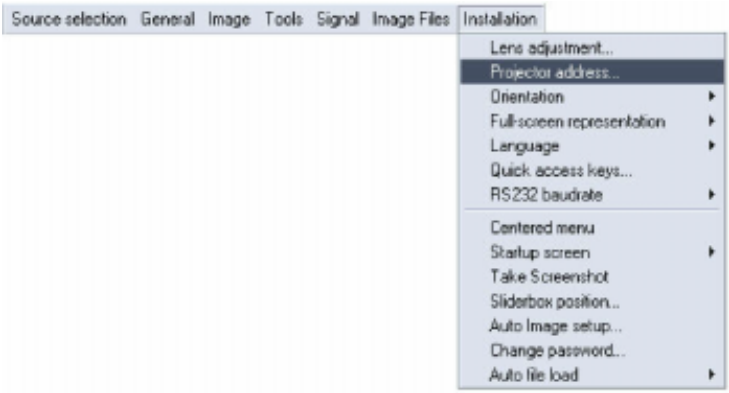

Image 11-4

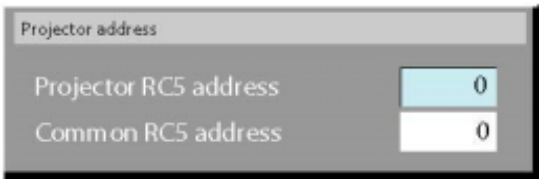

Image 11-5

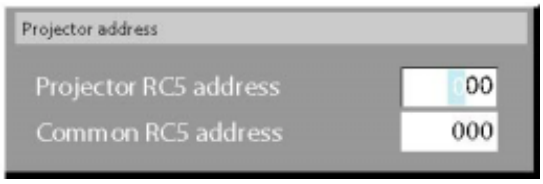

Image 11-6

Entering the new projector address ?

1. Enter the new projector address with the digit keys on the RCU, the local keypad or the cursor keys.

This address must be between 0 and 255.

How to change the common RC5 address ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Installation*
3. Press ↓ to Pull down the *Installation* menu
4. Use ↑ or ↓ to select *Projector address*
5. Press **ENTER**

   A dialogbox appears on the screen. (image 11-7, image 11-8)

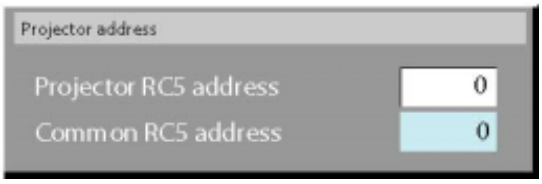

Image 11-7

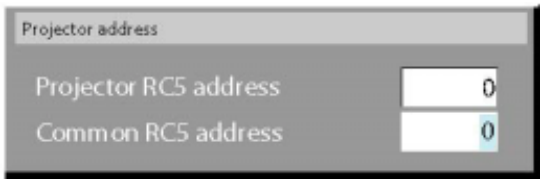

Image 11-8

Entering the new common address ?

1. Enter the new projector address with the digit keys on the RCU, the local keypad or the cursor keys.

This address must be between 0 or 1.

11.3 Orientation

Projector orientations

Depending on how the projector is oriented, the projector's internal settings have to be adapted.

How to change the orientation ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Installation* item
3. Press ↓ to Pull down the *Installation* menu
4. Use ↑ or ↓ to select *Orientation*
5. Press → to pull down the menu
6. Use ↓ or ↑ to select the desired orientation (image 11-9)
7. Press **ENTER**

   The projection is adapted and a black bullet shows the active configuration.

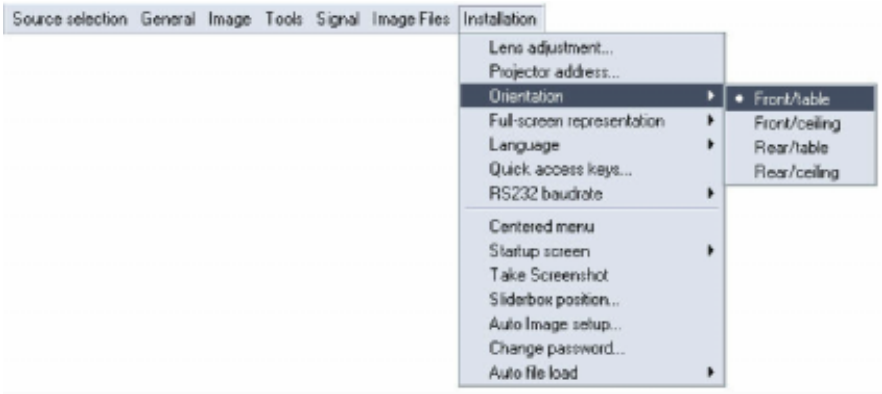

Image 11-9

11.4 Full screen representation

Purpose of the Full screen representation

The *Full screen representation* function forces to use the complete native resolution of the LCD panels independently of the native resolution of the source.

How to enable/disable the full screen representation ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Installation* item
3. Press ↓ to Pull down the *Installation* menu
4. Use ↑ or ↓ to select *Full screen representation*
5. Press → to pull down the menu
6. Use ↓ or ↑ to select ON or OFF
7. Press **ENTER**

The *show native resolution* function on the other hand forces to use the native resolution of the source.

The *Full screen representation* function overrules the *show native resolution function*.

11.5 Language

List of languages

The list of selectable languages is depending on the software of the projector.

How to change the orientation ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Installation* item
3. Press ↓ to Pull down the *Installation* menu
4. Use ↑ or ↓ to select *Language*
5. Press → to pull down the menu
6. Use ↓ or ↑ to select the desired language
7. Press **ENTER**

   The language is adapted and a black bullet shows the active configuration.

11.6 Quick access keys

What can be done ?

The 3 function keys on top of the RCU can be associated with a particular item in one of the menus.

Each function which is not password protected or does not have a key on the RCU can associated to a function key.

How to get an overview of the quick access keys ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Installation*
3. Press ↓ to Pull down the *Installation* menu
4. Use ↑ or ↓ to select *Quick access keys* (image 11-10)
5. Press **ENTER**

   A textbox appears on the screen.

Image 11-10

How to program the quick access keys ?

1. Scroll through the menus to the desired menu item
2. Push the desired function key for 3 seconds

   The menu item is stored in the quick access key

Factory pre-programmed functions

-F1 : color depth

-F2 : noise reduction

-F3 : orientation

11.7 RS232 baudrate

How to change the baudrate?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Installation* item
3. Press ↓ to Pull down the *Installation* menu
4. Use ↑ or ↓ to select *RS232 baudrate*
5. Press → to pull down the menu (image 11-11)
6. Use ↓ or ↑ to select the desired baudrate
7. Press **ENTER**

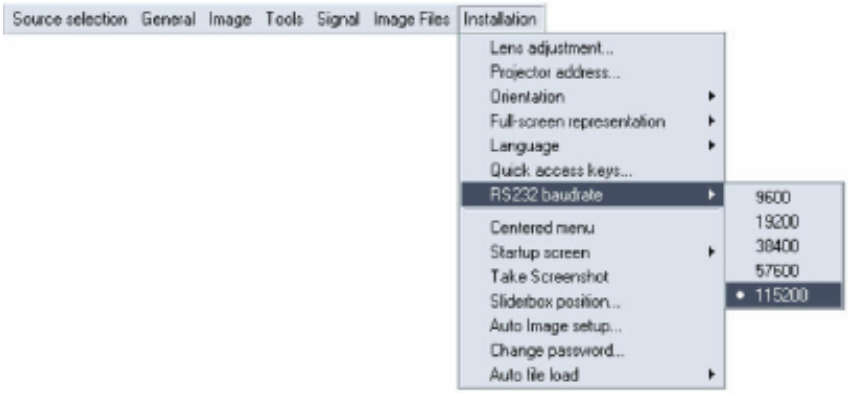

Image 11-11

11.8 Centered menu

What can be done ?

The menu toolbar can be centered vertically , the range being from top of the screen to the middle of the screen. This can be usefull in applications where the top image content is not displayed.

How to center the menu ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Installation* item
3. Press ↓ to Pull down the *Installation* menu
4. Use ↑ or ↓ to select *centered menu* (image 11-12)
5. Press **ENTER**

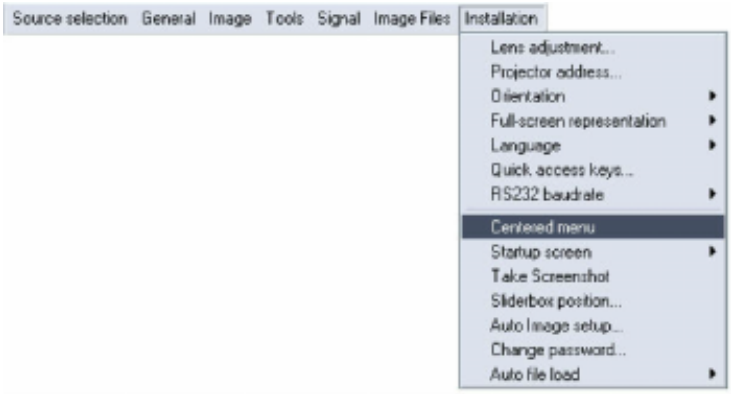

Image 11-12

11.9 Startup screen

What can be done ?

When the startup screen is enabled, the identification screen is displayed for a few seconds at startup. This startup screen can also be disabled.

How to enable/disable the Startup screen?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Installation* item
3. Press ↓ to Pull down the *Installation* menu
4. Use ↑ or ↓ to select *Startup screen* (image 11-13)
5. Press → to pull down the menu
6. Use ↓ or ↑ to select the desired baudrate
7. Press **ENTER**

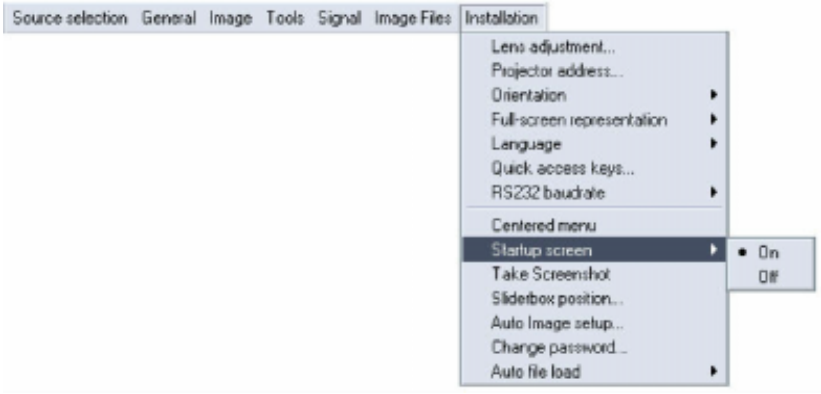

Image 11-13

11.10Take screenshot

What can be done ?

A screenshot can be taken from an active projected image. This screenshot is then saved in a RAM and can be used as background.

Each new screenshot erases the previous logo therefore a warning message is displayed asking the user to confirm.

How to take a screenshot ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Installation* item
3. Press ↓ to Pull down the *Installation* menu
4. Use ↑ or ↓ to select *Take screenshot* (image 11-14)
5. Press **ENTER**

   A dialogbox is displayed. Press **yes** to confirm. (image 11-15)

   A textbox shows the evolution of the operation. (image 11-16, image 11-17)

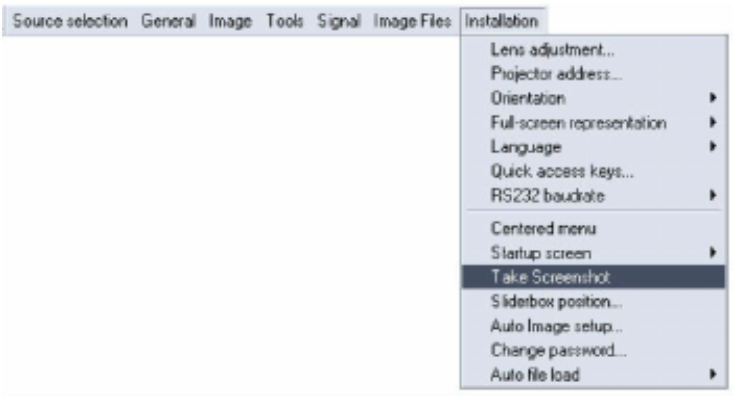

Image 11-14

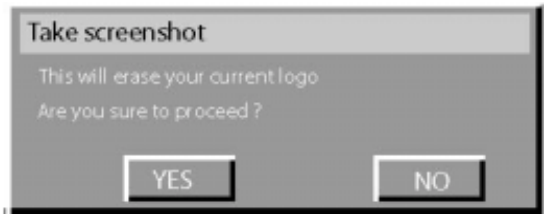

Image 11-15

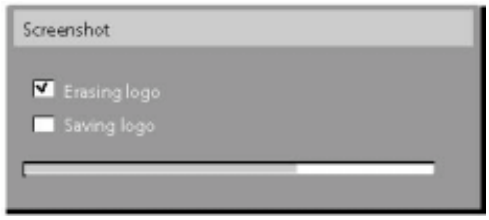

Image 11-16

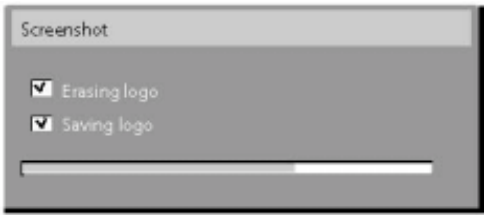

Image 11-17

11.11Sliderbox position

What can be done ?

The sliderbox can be displayed anywhere on the screen, the position can be set in this menu.

How to reposition the sliderbox?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Installation* item
3. Press ↓ to Pull down the *Installation* menu
4. Use ↑ or ↓ to select *Sliderbox position* (image 11-18)
5. Press **ENTER**

   A sliderbox is displayed. Use the 4 arrow keys to drag the box to the desired position. (image 11-19)

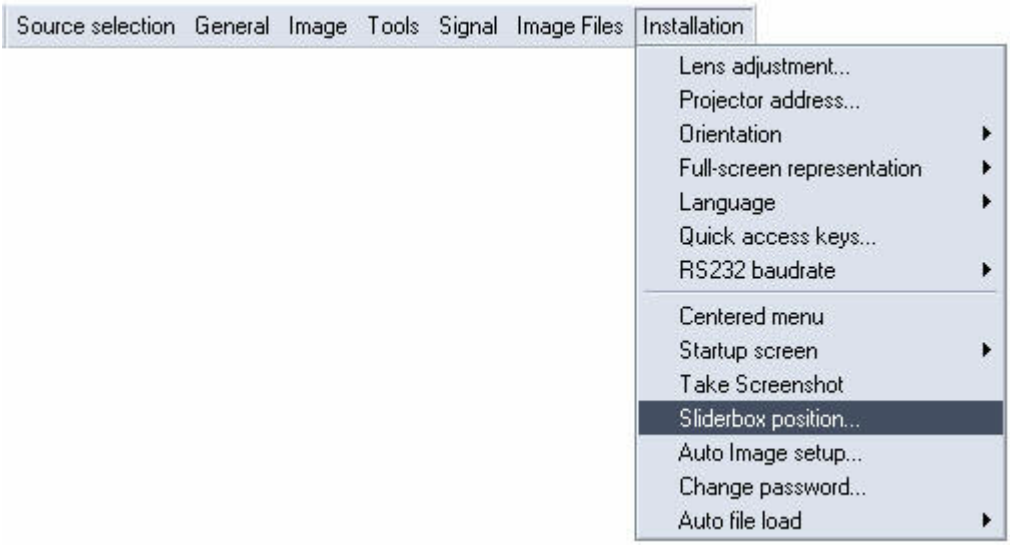

Image 11-18

Image 11-19

There is a coarse and a fine adjustment of the position, use ENTER (when sliderbox is displayed) to switch between the two.

11.12 AutoImage Setup

What can be done ?

Autoimage allows to detect automatically the characteristics of the source (total pixels per line,...) and uses this information to adapt the image to the LCD panels.

Autoimage can adapt the image based on following data :

- Total pixels per line
- Start pixel
- Phase
- Contrast/brightness levels

Autoimage works only for data signals.

How to set up AutoImage?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Installation* item
3. Press ↓ to Pull down the *Installation* menu
4. Use ↑ or ↓ to select *AutoImage setup* (image 11-20)
5. Press **ENTER**

   A dialogbox is displayed.

   (image 11-21)
6. Use the arrow keys to select the desired item and press **ENTER** to activate or disactivate the item.

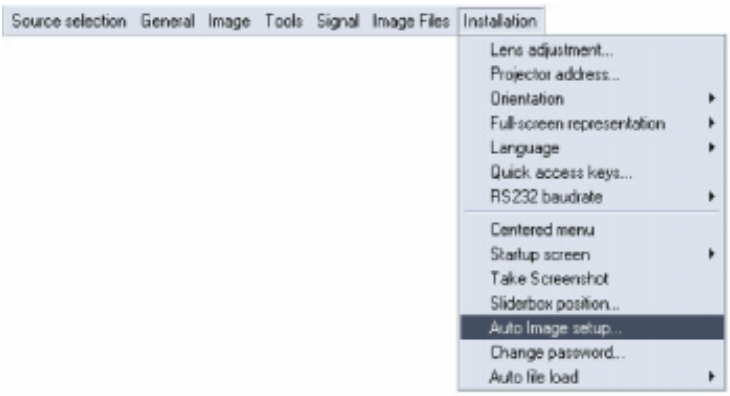

Image 11-20

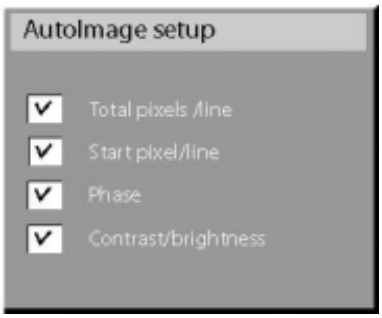

Image 11-21

11.13Change password

How to change the password ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Installation* item
3. Press ↓ to Pull down the *Installation* menu
4. Use ↑ or ↓ to select *Change password* (image 11-22)
5. Press **ENTER**

   A dialogbox is displayed.

   (image 11-23)
6. Use ← or → , the numeric keys on the remote , or the keypad to enter and confirm the new password.

   Each character is displayed as an asterisk.

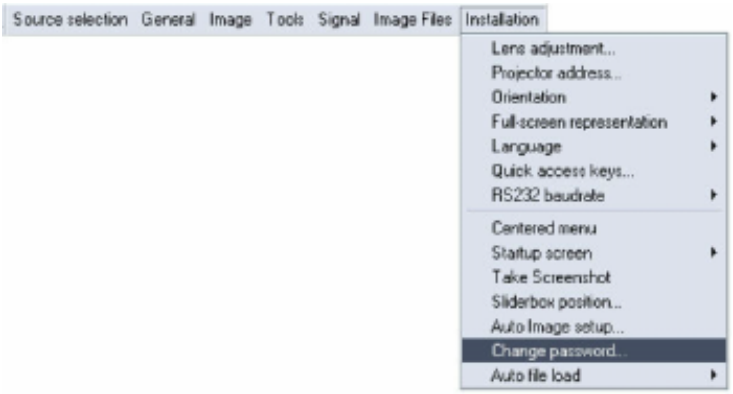

Image 11-22

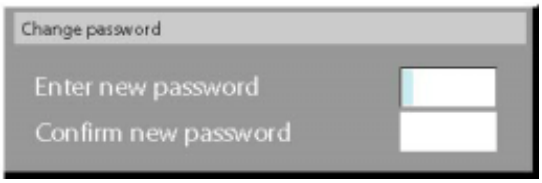

Image 11-23

The new password is accepted if the new password and the confirmed password coincide.

If the password is forgotten contact a Barco authorized technician.

11.14Auto file load

What can be done ?

The *Auto file load* option allows to create automatically an image file whenever a new source is detected, this file is then loaded and the source can be displayed using the settings of that particular image file.

In some cases however the user may choose to select an image file himself by using the *Load* (and *Edit* if necessary) in the *Image files* menu, therefore the Auto file load function can be disabled.

The *Auto file load* option allows a continuous checking of the selected source, if the characteristics of the source change, a new image file is automatically selected.

When *Auto file load* is enabled and an incoherent characteristic is detected (for example, no sync) the background is displayed (logo, blue or black screen)

Disabling the function implies that the source will be displayed independently of the changed characteristics (image scrambled in case of no sync)

How to enable/disable the Auto file load function ?

1. Press **MENU** to activate the Toolbar
2. Press → to select the *Installation* item
3. Press ↓ to Pull down the *Installation* menu
4. Use ↑ or ↓ to select *Auto file load* (image 11-24)
5. Press → to pull down the menu
6. Use ↓ or ↑ to select ON/OFF
7. Press **ENTER**

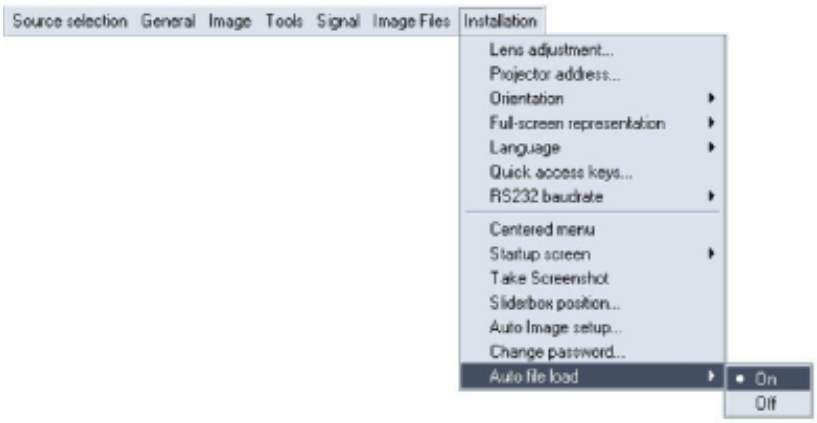

Image 11-24

A. STANDARD IMAGE FILES

A.1 Table overview

Table overview

The following standard image files are pre-programmed in the projector.

Name[3]	Resolution[4]	Fvert Hz[5]	FHor kHz[6]	Fpix MHz[7]	Ptot[8]	Pact[9]	Ltot[10]	Lact[11]
1600_48V	1600x600i	48,040	62,500	135,000	2160	1600	651	600
1600_60V	1600x1200	60,000	75,000	162,000	2160	1600	1250	1200
1600_65V	1600x1200	65,000	81,250	175,500	2160	1600	1250	1200
1600_70V	1600x1200	70,000	87,500	189,000	2160	1600	1250	1200
1600_75V	1600x1200	75,000	93,756	203,000	2160	1600	1250	1200
8514_A	1024x384i	43,479	35,522	44,900	1264	1024	409	384
CGA	640x200i	59,924	15.700	14.318	912	640	262	200
COMPUSC4	1024x480i	29,945	30,694	39,779	1296	1024	512	480
ED	735x480	59,943	31,470	28,638	910	735	525	480
EGA	640x350	59,702	21,851	16,257	744	640	366	350
EWS_50	1280x1024	50,000	52,350	87,948	1680	1280	1047	1024
EWS_100	1280x1024	100	107,204	185,249	1728	1280	1072	1024
EWS_50	1280x1024	50,000	52,350	87,948	1680	1280	1047	1024
EWS_60	1280x1024	60,000	63,900	107,352	1680	1280	1065	1024
EWS_60V	1280x1024	60,282	63,657	110,000	1728	1280	1056	1024
EWS_72	1280x1024	72,000	76,968	130,076	1690	1280	1069	1024
EWS_75	1280x1024	75,025	79,976	135,000	1688	1280	1066	1024
EWS_85	1280x1024	85 ,000	91,149	157,506	1728	1280	1072	1024
FMR	640x400i	42,323	36,440	28,570	784	640	431	400
FMTO_2	640x400	55,370	24,370	21,056	864	640	440	400
HD_1080i	1920x540i	30,000	33,750	74,250	2200	1920	562	540
HD720P	1280x720	60,000	45,000	74,250	1650	1200	750	720
HDMAC	1252x570i	25,020	31,250	39,125	1252	1024	625	570
INTER_GR	1184x886	67,170	61,796	92,941	1504	1184	920	886
MAC_2	640x480	66,667	35,000	30,240	864	640	525	480

3. Name: name of file, contains the settings.
4. Resolution: image resolution, when followed by ..i means interlaced.
5. Fvert Hz: vertical frame frequency of the source
6. FHor kHz: horizontal frequency of the source
7. Fpix MHz: pixel frequency
8. Ftot : total pixels on one horizontal line.
9. Pact: active pixels on one horizontal line.
10. Ltot: total lines in one field
11. Lact: active lines in one field.

Name[3]	Resolution[4]	Fvert Hz[5]	FHor kHz[6]	Fpix MHz[7]	Ptot[8]	Pact[9]	Ltot[10]	Lact[11]
MAC_3	512x384	60,147	24,480	15,667	640	512	407	384
MAC_4	560_384	60,147	24,480	17,234	704	560	407	384
MAC_5	512x342	60,158	22,259	16,670	704	512	370	342
MAC_6	832x624	74,546	49,722	57,280	1152	832	667	624
MAC_7	1024x768	74,907	60,150	80,000	1330	1024	803	768
MAC_LC	640x480	66,619	34,975	31,338	896	640	525	480
MAC_POR	640x870	74,996	68,846	57,280	932	640	918	870
MUSE	1172x518i	30,000	33,750	37,125	1172	1024	563	518
MXGA_60	1152x864	60,000	54,540	60,000	1456	1152	909	864
MXGA_70	1152x864	70,000	63,630	94,500	1480	1152	909	864
MXGA_75	1152x864	75,000	67,500	75,000	1600	1152	900	864
MXGA_80	1152x864	80,000	76,640	80,000	1440	1152	958	864
MXGA_85	1152x864	85,000	77,055	121,500	1576	1152	907	864
MXGA_100	1152x864	100	92,997	145,820	1568	1152	930	864
NTSC	675x240	60	15,748	13,512	858	675	263	240
NTSC_LIMO_x2	834x482	60	31,496	32,252	1024	834	525	482
NTSC_LIMO_x3	834x715	60	46,646	47,766	1024	834	778	715
NTSC_LIMO_x4	834x961	60	62,992	64,504	1024	834	1050	961
PAL	675x286	50	15,625	13,500	864	675	313	286
PAL_LIMO_x2	834x574	50	31,250	32,000	1024	834	626	574
PAL_LIMO_x3	834x850	50	46,296	47,407	1024	834	926	850
PAL_LIMO_x4	834x1146	50	62,500	64,000	1024	834	1250	1146
VIDEO525	1302x239i	29,970	15,734	32,207	1302	1024	263	239
VIDEO625	1024x278i	25,000	15,625	31,984	1310	1024	313	278
PAM500	640x400	60,000	26,400	22,810	864	640	440	400
PAM800	1120x375i	44,936	36,443	50,000	1372	1120	406	375
PC98_1	640x400	56,416	24,823	21,050	848	640	440	400
PC98_2	1120x375i	39,994	32,835	47,840	1457	1120	411	375
PC98_3	1120x750	60,000	50,000	78,569	1571	1120	833	750
S1152_66	1152x900	66,004	61,846	94,500	1528	1152	937	900
S1152_76	1152x900	76,637	71,809	108,000	1504	1152	937	900

Name[3]	Resolution[4]	Fvert Hz[5]	FHor kHz[6]	Fpix MHz[7]	Ptot[8]	Pact[9]	Ltot[10]	Lact[11]
S1600_67	1600x1280	67	89,286	200,000	2240	1600	1334	1280
SDI_625	675x278i	25,000	15,625	13,500	864	720	313	278
SDI_525	675x240i	29,970	15,734	13,500	858	720	263	240
SG_50	1600x1200	50,000	62,500	130,313	2085	1600	1250	1200
SG_60_1	1280x1024	60,000	63,900	107,352	1680	1280	1065	1024
SG_60_2	1024x768	60,000	48,780	64,390	1320	1024	813	768
SG_60_3	960x680	60,000	43,200	54,432	1260	960	720	680
SG_60_4	1600x1200	60,000	75,000	156,375	2085	1600	1250	1200
SUNEWS67	1280x1024	67,189	71,691	117,000	1632	1280	1067	1024
SUNEWS76	1280x1024	76,107	81,130	135,000	1664	1280	1066	1024
SUNXGA60	1024x768	59,984	48,287	64,125	1328	1024	805	768
SUNXGA70	1024x768	70,041	56,596	74,250	1312	1024	808	768
SUNXGA77	1024x768	77,069	62,040	84,375	1360	1024	805	768
SUP_MAC	1024x768	60,000	48,780	63,999	1312	1024	813	768
SVGA_56V	800x600	56,250	35,156	36,000	1024	800	625	600
SVGA_60V	800x600	60,317	37,879	40,000	1056	800	628	600
SVGA_72V	800x600	72,084	48,080	50,003	1040	800	667	600
SVGA_75	800x600	75,000	46,875	75,000	1056	800	625	600
SVGA_85	800x600	85,000	53,635	56,250	1048	800	631	600
SVGA_100	800x600	100,000	62,800	100,000	1056	800	628	600
VGA_60	640x480	60	31,326	25,061	800	640	525	480
VGA_72V	640x480	72,800	37,856	31,496	832	640	520	480
VGA_75	640x480	75,000	37,500	31, 500	840	640	500	480
VGA_85	640x480	85,000	43,369	36,000	832	640	509	480
VGA_GR	640x480	59,941	31,469	25,175	800	640	525	480
VGA_TXT	720x400	70,087	31,469	28,322	900	720	449	400
VGA75ISO	640x480	75,000	39,375	31,500	800	640	525	480
XGA_60	1024x768	60,000	48,360	64,996	1344	1024	806	768
XGA_70	1024x768	70,000	57,050	78,044	1368	1024	815	768
XGA_70V	1024x768	69,705	56,182	74,610	1328	1024	806	768

Name[3]	Resolu-tion[4]	Fvert Hz[5]	FHor kHz[6]	Fpix MHz[7]	Ptot[8]	Pact[9]	Ltot[10]	Lact[11]
XGA_72	1024x768	71,955	58,140	80,000	1376	1024	808	768
XGA_75	1024x768	75,781	61,080	86,000	1408	1024	806	768
XGA75_GS	1024x768	74,534	59,701	79,284	1328	1024	801	768
XGA_85	1024x768	85,000	68,680	94,500	1376	1024	808	768
XGA_EOS	1024x768	63,000	50,000	67,200	1344	1024	796	768
XGA_100	1024x768	100,000	80,800	100,000	1368	1024	808	768
hd_25i	1920x540	50,000	28,125	74,000	2640	1920	562	540
hd_30i	1920x540	60,000	33,750	74,000	2200	1920	563	540
hd_30i_2	1920x517	60,000	33,750	74,000	2200	1920	563	517
hd_24p	1920x1080	24,000	27,000	74,000	2750	1920	1125	1080
hd_25p	1920x1080	25,000	28,125	74,000	2640	1920	1125	1080
hd_30p	1920x1080	30,000	33,750	74,000	2200	1920	1125	1080
hd_60p	1280x720	60,000	45,000	74,000	1650	1280	750	720
hd_24sf	1950x540	48,000	27,000	74,000	2750	1950	562	540
2048_60v	2048x1536	60,000	95,822	240,000	2504	2048	1597	1536

Table A-1

B. CLEANING THE DUSTFILTER

B.1 Cleaning

When should it be done?

Depending on the environement, the dust filters should be cleaned at least when replacing the lamp. When the projector operates in dusty environement, clean the dust filters earlier than when replacing the lamp.

How to clean the dustfilter?

To clean the dustfilter, follow the next procedure :

1. Turn the projector upside down.
2. Turn out the 2 fixation screws of both dust filters. (image B-1, image B-2)
3. Clean the dust filter with a dry cloth.
4. Re-insert the dust filter.
5. Secure their position by insertion and tightening 2 fixation screws.

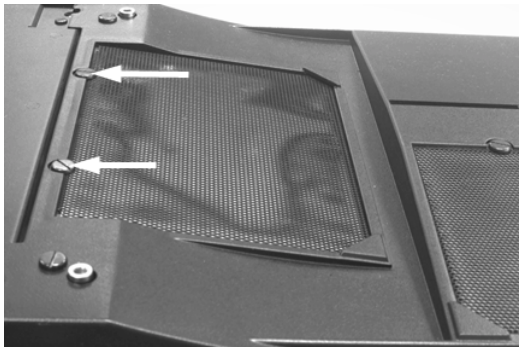

Image B-1

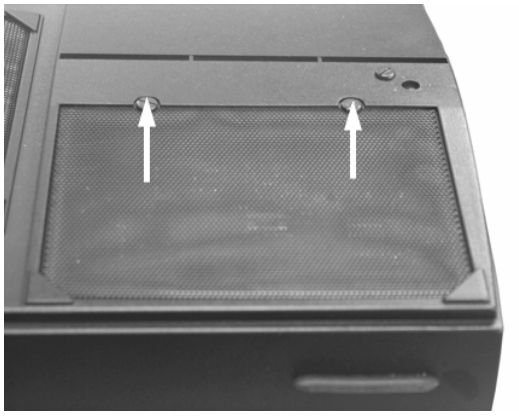

Image B-2

GLOSSARY

AGC

Automatic Gain Control: allows an automatic amplitude (gain) control of the incoming video signal

ANSI 73.11

American power plug to connect the power cord to the wall outlet.

CEE7

European power plug to connect the power cord to the wall outlet.

Common address

Default address. Projector will always execute the command coming from a RCU programmed with that common address.

DVI

Digital Visual Interface is a display interface developed in response to the proliferation of digital flat panel displays. It uses a high speed serial interface with TMDS (Transition Minimized differential signalling) to send data to the display.

DVI can be single or dual link.

PiP

PiP stands for "Picture in Picture" and allows to display multiple windows containing each of them an image. The windows may be of the video or data type.

Projector address

Address installed in the projector to be individually controlled.

Video

Composite Video is a single video signal that contains luminance, color and synchronization information. NTSC, PAL and SECAM are examples of composite video systems.

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Revision Sheet

To:

Barco nv Simulation Products
Noordlaan 5, B-8520 Kuurne
Phone: +32 56.36.82.11, Fax: +32 56.36.84.86
E-mail: info@barco.com, Web: www.barco.com

From: _____

Date: _____

Please correct the following points in this documentation (**R5976495/01**):

page	wrong	correct